

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF BENGALI

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BA HONOURS IN BENGALI

Course Learning Outcomes (Translated)

Semester -1

Core course/1[C—1]

A History of Bengali Literature (Ancient and Mediaeval Age)

From this course students will be able to know the history of Bengali language and literature. At the same time, they will be aware of the history and political changes of Bengal from the tenth to the eighteenth century. Also they will be familiar with the socio-literary culture of that time.

Core course/2[c—2]

Medieval Poetry

From the medieval poetry, students will learn about Vaishnavism and Shakto philosophy. And they will get an idea of later literary influences and also will know about the endangered society and culture of the eighteenth century. In that situation they will know how Shakto literature, Kabigan, Toppa, Thungri was originated.

Generic Elective Course

(Inter Disciplinary)

1st Semester

Course/1 [GE—1]

A History of Bengali culture and Literature

Through this course, other courses' students apart from Bengali will get acquainted with Bengali language- literature and culture.

Semester—2

Core Course/3 [C—3]

A History of Sanskrit and English Literature

Students will learn about the origin and development of Sanskrit and English literature. They will be familiar with different form of literature such as poem, drama, novel etc. From Sanskrit literature, they will learn about the ancient civilization and culture. And also, they will learn about how Sanskrit literature has influenced in later literature. And this goes same for English.

Core Course/4 [C—4]

A History of Bengali Language

From this topic, students will be able to understand the definition and features of the language and will be aware of the origin and development of the Indian Aryan language. They will also get an idea of how Bengali language was originated and will know the features of Phonetics, Syntax, and semantics. Moreover, they will be able to distinguish between colloquial speech and literary speech and they will learn about the nature of language in today's world.

Semester—2

Bengali Communication (MIL)

Students of different departments of different disciplines will gain knowledge about Bengali language and literature as a modern Indian language through this course. Through essay reading, a student will get an idea about both pariksha and aesthetic analysis (meaning of poetry). By learning how to write newspaper reports students will be benefited in the future.

Generic Elective Course

(Inter Disciplinary)

2nd Semester

Course/2 [GE—2]

Linguistic

From this topic, students will be able to understand the definition and features of the language, will be aware of the origin and development of the Indian Aryan language, and from there they will also get an idea of how Bengali language was originated. They will know the features of Phonetics, Syntax, and semantics. They will learn to distinguish between colloquial speech and literary speech and also will learn about the nature of language in today's world.

Semester—3

Core Course/5[C—5]

Mangalkavya O Charit Sahityo

Mangalkavya and Charit Sahitya is an important element of medieval Bengali literature. From this topic, Students will learn about the stories and poets of mangalkavya and charit sahityo. They will be aware of the history of rise and fall of medieval Bengali politics and the identity of the creation of literature. They will also know Chaitanyadev's contribution in Bengali literature and will be able to learn about Chaitanyadev's influence on Bengali society and literature through Chaitanya biography. They will get to know the Bhakti movement which centered on Chaitanya.

Core Course/6[C—6]

Definition and characteristic of Rhythm and Rhetoric

Rhythm and rhetoric play a significant role in literature. In this topic, students will learn about the need of rhythm in poetry. They will be aware of the variety of rhymes and rhetoric in Sanskrit and Bengali poetry and learn to determine the rhythm and rhetoric of poetry.

Core Course/7[C—7]

Poetry of Nineteenth century

The nineteenth century has enriched Bengali literature in various ways. Originality in the mind, thought and literature can be easily noticed of this period. In this topic, students will be able to understand the cultural changes, as a result of the western concussion and renaissance of the nineteenth century. Students will be able to know the Bengali poets and the nature of their poetry. Students will understand the nature and difference of lyrical ballads and narrative poetry. Students will learn more about nineteenth century's female poets. This topic has been included in the syllabus for the purpose of introducing the rich Bengali literature of the nineteenth century.

Skill Enhancement Course (SEC)

Course/1 [SEC—1]

Semester—3rd

Bengali Grammar

Students will gain a thorough knowledge of Bengali language and grammar by mastering this selected part. Students' grammar comprehension and application skill will increase. They will learn to write the language accurately and precisely. They will be able to know in detail about the component and syntax theory of Bengali language. Students will learn to analyze the language of literature.

Course/2 [SEC—2]

The efficiency of Creativity

Through this course students will learn to write creative and original basic writing. They will learn to write reports and paragraphs. They will be able to expand the meaning and concept. This course will help them to deal with various aspects of their practical life and world. As well as it will help the students to get job in different fields.

Course/3 [GE—3]

Bengali Novel

From this topic students will learn about the history of origin of Bengali novels. Along with reading Bengali novels, they will also learn about the outline of western novels. From modern Bengali novels, they will get acquainted with the social thought of that time and the way of life of Bengal. They will gain knowledge about the influence of western culture in Bengal society. They will know about the philosophy of the writer. The student's mind will be nourished by the consciousness of life and eternal life in the novel lesson.

Course/4 [GE—4]

Bengali poem

From this topic, students will be able to know about the poetic thought of the nineteenth century and the dynamic nature of Bengali poetry after the first world war of the twentieth century. They will get acquainted with various literary movements and doctrines. They will know the modern features related to the style of poetry and will know the rules of prose poetry. Also students will be inspired to write modern poetry.

Semester—4

Core course/8[C-8]

Nineteenth Century's Drama

The writing of modern and original plays of Bengal started in the nineteenth century. In this course students will learn about the origin and history of Bengali drama literature. They will know about the definition, features and theory of drama and also will know the history of Bengali drama and theater of nineteenth century. They will learn about the art of acting in western drama literature, be interested in acting on stage, and also they will know about nineteenth century's society.

Core course/9[C-9]

Twentieth century's Drama

From this topic, students will be able to learn about twentieth century's play and playwrights. They will know about the structure of the theoretical drama, realism and nationalism of the twentieth century and also will be familiar of modern theater. They will be introduced to GONO NATOK and NOBO NATOK. Moreover, they will learn about the dynamics of literature which is created by the two world wars and those shocks. They will know the background of partition and post-independence society change. It has been included in the syllabus to make the student aware of all these issue.

Core course/10[C-10]

Novel of Ninetieth and Twentieth century

From this topic, students will learn about Bengali prose language and style. They will know about the origin of Bengali novels. Moreover, they will know the social life of nineteenth and twentieth century from noksa (sketch) writing. They also will gain knowledge about the influence of western culture in Bengali society. Above all in the novel lesson students will be find and aware the meaning of life and direction of life. It has been included in the syllabus for the purpose of introducing various aspects of nineteenth and twentieth century Bengali novels.

Skill Enhancement Course

Semester—4

Course/1 [SEC-1]

Byaboharik Bangla Charcha

Through this course students will learn how to draft advertisements and printing techniques. They will learn the rules of proofreading and how to correct proofreading and report writing in newspapers. These things will help students to get jobs in different fields.

Course/2 [SEC-2]

Translation (From English to Bengali)

Through this course students will learn about the usefulness of translation. They will learn about the history of translation in Bengali literature. They will learn to translate from other language. They will also learn the method of transliteration along with the literal translation of the original text. This course will help them to deal with various aspects of their practical life. As well as it will help the students to get jobs in different fields.

Generic Elective Course

(Inter Disciplinary)

Course/5[GE-5]

Bengali Drama

The writing of modern and original plays of Bengal started in the nineteenth century. In this course students will learn about the origin and history of Bengali drama literature. They will know about the definition, features and theory of drama and also will know the history of Bengali drama and theater. They will learn about the art of acting in western drama literature, be interested in acting on stage. And also they will know the nineteenth century's society.

Course/6

Bengali Essay

In this topic, students will learn about the nature and features of essay writing. They will know the nature of Bengali prose literature and essay literature. They will learn about essay style and language and also learn essay writing techniques. They will be introduced to philosophical ideas and social consciousness in literary essays.

Semester—5

Core Course/11 [c—11]

Poetry of Nineteenth and Twentieth century

Bengali poetry has occupied a place not only in India but also in the history of world literature. In the nineteenth and twentieth century, Bengali poetry reached its peak of prosperity. In this topic, students will be able to know about the nineteenth and twentieth century's poetry, and will know the nature and genre of poetry. They will learn about western influences in nineteenth century poem. They also will know the nature of modern poetry. They will learn to analyze poetry and Learn about the world war and the crisis of human civilization. Moreover, they will understand the style of poetry and its evolution.

Core Course/12 [c—12]

Modern Bengali Novel

20th century Bengali literatures are enriched with creative and thoughtful writing. In this topic, students will be able to learn about definition of modern novel, characteristic and type as well as they will know the history of the origin and development of Bengali novel. From the modern Bengali novels, they will get acquainted with the social thought, the philosophy of writer, and the way of life of Bengal on that time. They will be aware of socio-eco-culture.

Discipline Specific Elective (DSE)

Course/1[DSE—1]

Lyrical Ballads and Narrative Poetry of nineteenth century

In this topic, students will learn about the characteristics and classification of lyric poetry. They will be able to analyze the language, rhyme and rhetoric of poetry. They will be able to recognize the connection and uniqueness of lyric poetry. They will be able to know about romantic consciousness and western influence in Bengali lyric poetry. They will be able to understand the nature and difference between lyric poetry and narrative poetry. They also will know the history of lyric poetry and narrative poetry. Navin Chandra Sen's "Palasir yuddho" is one of the important chapters of nineteenth century narrative poetry in Bengali literature. In this course they have the opportunity to know that.

Course/2[DSE—2]

Essay of Nineteenth Century

In this topic students will learn about the history of nineteenth century Bengali essays. They will learn about the variety of Bengali essays from Fort William College to pre-Rabindranath. They will also learn the features of nineteenth century essays. They will know about style and language of nineteenth century essay. And will know the nineteenth century's society. In the second half of the nineteenth century, they will be able to know the epoch-making background of Bengali essay writing. By reading essays, they will get acquainted with the social superstitious customs and the educated Bengali youth. They will learn the essay writing techniques.

Course/3[DSE—3]

Short stories of Tarashankar and Manik Bandopadhyaya (Selected)

From this topic, students will learn about the features and nature of short stories. They will learn about the origin and development of short stories. They will learn about the features and nature of short stories of Tarashankar and Manik Bandopadhyaya. They will understand about the short story theory and social thinking of Tarashankar and Manik Bandopadhyaya. They will be aware of the construction style of Bengali story. They will experience the post-world war 1 social crisis and try to understand the nature of the storyteller's mind.

Course/4[DSE—4]

Bengali Drama

The writing of modern and original plays of Bengal started in the nineteenth century. In this course students will learn about the origin and history of Bengali drama literature. They will know about the definition, features and theory of drama and also will know the history of Bengali drama and theater. They will learn about the art of acting in western drama literature, be interested in acting on stage. As well as they will know the nineteenth century's society.

Course/5[DSE—5]

Bengali Essay

In this topic, students will learn about the nature and features of essay writing. They will know the nature of Bengali prose literature and essay literature. They will learn about essay style and language and also learn essay writing techniques.

Semester—6

Core course/13[C-13]

Bengali Short stories

In this topic, students will learn about the definition and features of Bengali short stories, which are comparable to the rich short stories in world. They will learn about the outline of short stories in world literature. They will know about the origin and development of short stories in Bengali literature. They will learn about the construction of short story diversity theory and social thought. They will learn about the construction style of Bengali short story and will learn to understand the dangers and crisis of modern age. Students will be able to innovate the nature of Bengali story through reading Bengali stories. Moreover, students will be inspired to write stories.

Core course/14[C-14]

Literary Theory

In this topic, students will learn about the nature and features of poetry, and will learn about the variations of Indian poetry. They will learn to judge poetry by its originality. Students will be informed about the various type of poetry, phonology, stylize and humor. They will learn to judge the poetic style and will know the history of development of Indian rhetorical theory. They will be able to know the influence of western style of Bengali literature and will understand the abstract truth of modern sign and symbolic literature. They will learn about the western poetry and will learn about epics, tragedy and imitation theory. They will be aware of the features of various styles of literature. Literary theory is a helpful and important part of literary lessons. It is important to inform the students about the various ideologies and doctrines of Indian and Western literary theory.

Discipline Specific Elective (DSE)

6th Semester

Course/1[DSE—1]

Prose of the Twentieth Century

From this topic, students will learn about the history of prose literature. They will be aware of the origin and development of prose literature and will know about the nature and features of prose writing. They will be aware of how the prose of the nineteenth century evolved and took shape in the twentieth century. They will be aware of prose style.

Course/2[DSE—2]

Bengali One Act Drama

In this topic, students will be able to know about the history of Bengali One act play. They will be able to know about the natures and features of Bengali one act play. They will have the opportunity to read about the various variations of one act play. And also they will be interested in staging One act play.

Course/3[DSE—3]

Letter Literature and Autobiography

Letters and Autobiographies are a rich branch of Bengali literature. How the letter gets the level of an exclusive literature can be found in the letters written by many Bengali writers. In this context, we can say the letters written by Rabindranath Tagore was magnificent and full of **literary quality**. It seems necessary to introduce the students to this rich vast literature world. Moreover, these autobiographies written in Bengali language is an essential and wonderful document for that contemporary time period. So, this part of literature has been included in syllabus.

Course/4[DSE—4]

Natyakavya O Kavyanatya

In this part, the students will get to know about Kavyanatya and Natyakavya. They will also know about the structure and characteristics of this topic. Moreover, they will know about the diversity in Natyakavya and kavy natyo. After finishing this course, they will be knowledgeable in the theory, structure and style of kavyanatya. And last but not the least, this course will help them to study the art form of natyakavya and kavyanatya.

Course/5[DSE—5]

Folk Culture and Folk literature

Folk-culture and folk-literature is an essential element in Bengali tradition and culture. In this course the students will know about folk-culture and folk-literature. The effect of Bengali folk-culture and folk society can be observed clearly in Bengali literature. This subject has been included in this curriculum to enrich the mind of young students about Bengali folk culture.

BA PROGRAM IN BENGALI

Course Learning Outcomes (Translated)

Semester -1

Core course/1[C—1]

A History of Bengali Literature and Language

From this course, students will get a detailed idea about the origin and development of Bengali language and literature. They will learn about the major aspects of the continuous history of literature from the tenth to the twentieth century. Also, through this course student will get an idea about dialects of Bengali language, vocabulary, nature of phonetic variation and Bengali semantics etc.

MIL—1

CC (3)1

Bengali lyrical Ballads and short Stories

From this course students will be able to learn about the literary resources of Bengali language as a modern Indian language. At this topic they will get a detailed idea about the lyric or lyric poetry of the nineteenth century. They will gain a thorough knowledge of modern Bengali short stories and storytellers. In this topic, students will learn about the uniqueness of Bengali literature by reading the famous poems of Madhusudan Dutta, Grindramohini Dasi, Iswar Gupta, Rangalal Bandopadhyaya and Satyendranath Dutta. Students will also know that Bengali literature can be compared to any international standard literature by reading the story of Tarashankar, Manik, Bivuti and Bonoful's Stories.

2nd Semester

CC-1 (2)

Rhythm and Rhetoric

Rhythm and rhetoric play a significant role in literature. In this topic, students will learn about the need of rhythm in poetry. They will be aware of the variety of rhymes and rhetoric in Sanskrit and Bengali poetry and learn to determine the rhythm and rhetoric of poetry.

AECC-2

Bengali Communication (MIL)

Students of different departments of different disciplines will gain knowledge about Bengali language and literature as a modern Indian language through this course. Through essay reading, a student will get an idea about knowledge test (Bodh Pariksha) and aesthetic analysis (meaning of poetry). By learning how to write newspaper reports students will be benefited in the future.

3rd Semester

Core course 1/ (3) [CC—1(3)]

Madhyayuger Bangla Podaboli

Students of this course will get to know about Vaishnava Shakta theory and philosophy. They will learn about the ideas and forms of the eminent Vaishnava and Shakta poets of the middle age. From this topic, students will also learn about the literary value of Vaishnav Podaboli and the effect of podaboli on later art and literature. In this course, students will be able to learn about the writing skills of Shakta poets and the identity of the endangered society and culture of the eighteenth century.

SEC—1(Skill Enhancement Course)

The efficiency of Creativity

Through this course students will learn to write creative and original basic writing. They will learn to write reports and paragraphs. They will be able to expand the meaning and concept. This course will help them to deal with various aspects of their practical life and world as well as help the students to get job in different fields.

MIL—II

CC-3(3)

Poems and Novels by Kazi Nazrul Islam

Kazi Nazrul Islam is one of the leading post-Rabindra of the twentieth century. Nazrul Islam's writing reveal people's hopes, aspirations, frustration and rebellions in the post-World War I era, the purpose of this course is to inform the students about it. Poet Nazrul is not only a rebellious, revolutionary protester but he also has a romantic and natural consciousness which can be identified from his selected poem.

4th Semester

Core Course/1(4) [CC—1/4]

Rabindranath's and Modern Bengali Poem

In this part of the syllabus students will be able to read and analyze the significant poems of Rabindranath. His poems have transcended the borders of Bengal and India and have taken place in world literature. In this part, Students will be made aware of the poet's mind from beginning to end. From selected poems in the syllabus, students will know about poet's philosophy of life, his love of nature and love of tradition. From this section, students will also be informed about the genre of post Rabindranath modern poetry. In this part, students will get a detailed introduction to the poet who brought unique and diverse ideas and forms in the field of modern poetry after the first and second world wars. Students will

be able to gain a thorough knowledge of not only new ideas but also the vast changes in words, rhythms and rhetoric in the poetry of modern Bengali poets.

4th Semester

SEC—2

Bengali Grammar

Students will gain a thorough knowledge of Bengali language and grammar by mastering this selected part. Students' grammar comprehension and application skill will increase. They will learn to write the language accurately and precisely. They will be able to know in detail about the component and syntax theory of Bengali language. Students will learn to analyze the language of literature.

5th Semester

DSEC—2(1)

Bengali Novel

From this topic students will learn about the history of origin of Bengali novels. Along with reading Bengali novels, they will also learn about the outline of western novels. From modern Bengali novels, they will get acquainted with the social thought of that time and the way of life of Bengal. They will gain knowledge about the influence of western culture in Bengal society. They will know about the philosophy of the writer. The student's mind will be nourished by the consciousness of life and eternal life in the novel lesson.

5th Semester

Skill Enhancement Course (SEC)

SEC—3

Byaboharik Bangla Charcha

Through this course students will learn how to draft advertisements and printing techniques. They will learn the rules of proofreading and how to correct proofreading and report writing in newspapers. These things will help students to get jobs in different fields.

5th Semester

Skill Enhancement Course (SEC)

SEC—3

Translation (From English to Bengali)

Through this course students will learn about the usefulness of translation. They will learn about the history of translation in Bengali literature. They will learn to translate from other language. Students will also learn the method of transliteration along with the literal translation of the original text. This course will help them to deal with various aspects of their practical life and world as well as help the students to get job in different fields.

5th Semester

Generic Elective Course

GEC—1

Selected Story and Essay

Short story is a rich branch of Bengali literature which is comparable to short story of world literature. In this course students will learn about the definition and features of short stories. They will learn about the origins, variety and theory of short stories. In modern short stories, students will be able to get a detailed picture of the epoch endangers, epoch torments and crises. Through the practice of short stories, students will be able to learn about the features of post-Rabindra post-colonial era. They will get to know the life story, prominent social thought, human values and its depravity as depicted in the stories of modern storytellers such as Bibhutibhusan, Tarashankar to Subodh Ghosh, Narendranath Mitra, Narayan Gangopadhyay to Samresh Basu. On the other hand, essays are also included in this course for the purpose of introducing one of the most important branches of Bengali literature with. From this topic, students will learn about the history of 19th and 20th century's essay and also will find ideas about 19th and 20th century social thought, social and family customs, the plight of Bengal and politics. The purpose of this course is to teach how to write essays on socio-culture and literature which will develop in students' ability to think and analyze judgment

5th Semester

Generic Elective Course

GEC—1

Aloukik Golpo O Kolpokahni

Along with the main genres of Bengali literature, there is an abundance of stories and novels of other genres, the most notable of which are Miracle stories and fairy tales (Fantasy). In this topic, the miraculous stories of Rabindranath, Parsuram, Sharadindu and Satyajit Ray will help to increase the imagination of the students. There is a miraculous fantasy world alongside serious thoughts like sociality, politics, deep psychoanalytic reality, life struggle etc. This world peeks through the difficult realities, the emotional mind sometimes touches that world, entering an unknown world, there may be grayness in ancient history, reincarnation context. These rational modern minded people also want to believe in such a miracle fantasy. Shirsendu Mukhopadhyaya and Bimal Kar wrote fantasy or fiction just like the famous fantasy writers of Bengali literature. In this topic, students will be well informed about them. They will get an idea about the Bismoy ros and advut ros of Bengali literature.

6th Semester

DESC—1

Drama of Nineteenth and Twentieth Century

From this topic, students will be able to know about the origin and history of drama of nineteenth and twentieth centuries. The original drama of Bengal originated in nineteenth century but in the twentieth century it reached its peak of prosperity. Students will gain detailed knowledge about the definition, features, different types of drama and genre of western drama etc. They will be able to learn about mythological, social, historical drama and comedies by studying the continuous history of drama. Nineteenth century Bengali drama is simultaneously a social and historical document. On the other hand, twentieth century Bengali drama is very rich in variety, modernity, tradition of events, different ideologies and political context etc. They will learn about twentieth century playwrights and their theatrical ideas in this topic. Through reading dramas of the twentieth century, they will be able to know the perspective of symbolic drama, realism, social and political movement and the revolutionary uprising.

6th Semester

DESC—2

Science Fiction and Detective Stories

The other two popular genres of Bengali literature are science fiction and detective story. Science fiction writers want to evoke imagination in the science of logic by adding some possible imaginary formulas to science. Satyajit Ray's 'Prof. Shonku kahini' is a kind of science fiction where science is immersed in imagination and creates curiosity in the mind of reader. The purpose of this course is to arouse the curiosity of the students and to enliven the imagination of the students in the arts. On the other hand, detective stories have been attractive people of all classes for a long time. Students will be able to know the history of serial detective stories of writers like Sir Arthar Conan Doyle, Alfred Hitchcock, Sharadindu Bandyopadhyaya, Satyajit Ray, Niharajan Gupta, Adrish Bardhan, Premendra Mitra, Hemendra Kumar Roy in Bengal. The type of crime, the reason behind the crime, the psychology of the offender, the strategy to identify the offender require sharp intelligence. Through intelligence stories, Students can learn how to capture criminals through human psychology, criminality, criminal justice analysis and sharp-witted practice that will help them in their future lives and livelihoods.

6th Semester

SEC—4

Proyag Soili (Application Style)

Through this course students will learn to write creative essays. As there are no approved or specific books for this course, they will be able to practice any topic and gain detailed knowledge about editing any text. They will also be proficient in the analysis of prose style and poetic aesthetic. They will be able to independently apply their specialties, textures and styles to their composition. They will also get various benefits in future through the study and practice of applied style at Bengali undergraduate level.

6th Semester

SEC—4

Composition and Presentation of Project Papers

In this course students will learn to compose projects on a variety of topics. And they will be able to make analytical and research presentations on culture, literature, contemporary events and environment through this course. It is hoped that this course will play a vital role in the future life of the student.

6th Semester

GEC—2

Bengali Child Literature

Bengali children's literature has developed based on fairy tales, legends, fantasy, Jatok's story and Stories of Panchatantra etc. It has been enriched by writings of Rabindranath, Dakshinaranjan Mitra Majumdar, Upendrakishore Roychowdhury, Sukumar Roy and Satyajit Ray. Through the writing of these writer Students will be able to go back to the imaginary world of childhood. They will learn about the continuous history, features and prominent prose style of children's literature.

6th Semester

GEC—2

Bengali Prose Literature

In this part of the curriculum, students will gain knowledge about prose literature, one of the richest genres of Bengali literature. They will learn about the continuous history of prose literature and also will get to know the form of nineteenth century prose literature in the twentieth century. In this course they will get a detailed introduction to the prose style of renowned prose writers Abanindranath Tagore and Syed Mujtaba Ali.

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BA HONOURS IN CLASSICAL VOCAL MUSIC

COURSE LEARNING OUTCOMES

Semester: I

Course Name: Fundamentals of Hindustani Classical Music

Course Code: BAHMVC101

Course Type: Core (Practical)	Course Details: CC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn about the basic knowledge of music like - Sudha - swara, Vikirita - swara, Palta, Alankar.
- (2) They will learn about the basic knowledge of Ten-Thatas, theoretical and practical knowledge.
- (3) They will also learn about some primary Ragas and about some primary Talas.

Semester: I

Course Name: General Theory - I

Course Code: BAHMVC102

Course Type: Core (Theoretical)	Course Details: CC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper students will learn the history of Indian music in the ancient period.
- (2) Students will also learn the knowledge of various musical instruments.
- (3) The learners will also learn about some musical terms, rhythm details and notation system.

Semester: II**Course Name: Introduction to Basic Ragas and Drut Kheyal****Course Code: BAHHMVC201**

Course Type: Core (Practical)	Course Details: CC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) In this paper students will learn Drut Khayal or Chota Khayal.
- (2) They will learn the Bistar and Taan of some Ragas.
- (3) The learner will also learn to identify prescribed Ragas.

Semester: II**Course Name: General Theory - II****Course Code: BAHHMVC202**

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn about History of Indian Classical music of the medieval period.
- (2) The students will also learn some musical terms, details theory of Ragas and similar type of Ragas.
- (3) Also they will learn the notation system and the life history of great Indian musicians.

Semester: III**Course Name: Introduction to Dhrupad and Dhamar****Course Code: BAHHMVC301**

Course Type: Core (Practical)	Course Details: CC-5			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper students will learn the basics of Dhrupad and Dhamar.
- (2) Students also learn how to sing it.

Semester: III**Course Name: Introduction to Vilambit and Drut Kheyal****Course Code: BAHHMVC302**

Course Type: Core (Practical)	Course Details: CC-6			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn how to sing Vilambit Khayal and Drut Khayals with - Alap, Bistar and Tanas.
- (2) They will also learn to identity the prescribed Ragas.
- (3) Also they'll learn to sing "Tarana".

Semester: III**Course Name: History of Music and General Theory****Course Code: BAHHMVC303**

Course Type: Core (Theoretical)	Course Details: CC-7			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn the types of Ragas, musical terms,
- (2) They will learn time theory of Raga, method of producing 72 melas.
- (2) They will also learn detailed theoretical knowledge and comparative study of similar types of Ragas.

Semester: III**Course Name: Knowledge of Harmonium****Course Code: BAHHMVSE301**

Course Type: SE	Course Details: SEC-1			L-T-P: 0 - 0 - 8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The student will acquire an elementary knowledge of Harmonium and its various parts.
- (2) They will learn about Harmonium finger techniques.
- (3) They will also learn about sound production from this paper.

Semester: IV**Course Name: Improvisational Techniques in Vilambit and Drut Kheyal****Course Code: BAHHMVC401**

Course Type: Core (Practical)	Course Details: CC-8			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper, students will learn Vilambit Khayals and Drut Khayals with Bistar and Tanas.
- (2) Also they will learn how to perform the rhythm by Tali and Khali.

Course Content:**Semester: IV****Course Name: Thumri, Dadra and Other Compositional Forms of Semi-Classical Music****Course Code: BAHHMVC402**

Course Type: Core (Practical)	Course Details: CC-9			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn Thumri, Dadra forms of semi classical music from this paper.
- (2) They will learn about the other compositional forms of semi classical music from this paper.

Semester: IV**Course Name: Theoretical Knowledge and Comparative Study of Ragas****Course Code: BAHHMVC403**

Course Type: Core (Theoretical)	Course Details: CC-10		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will attain detailed theoretical knowledge and get acquainted with a comparative study of similar types of Ragas and Talas.
- (2) Also they will learn to write the notation system.

Semester: IV**Course Name: Project Work and Performance****Course Code: BAHHMVSE401**

Course Type: SE	Course Details: SEC-2			L-T-P: 0 - 2 - 4	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will carry out a Project work on the life sketch of anyone eminent harmonium player.
- (2) They will also learn to give solo performance with the tabla (Tabla Sangat).

Semester: V

Course Name: Vilambit and Drut Kheyal : Alap and Tanas - I

Course Code: BAHHMVC501

Course Type: Core (Practical)	Course Details: CC-11			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper, students will learn to sing Vilambit and Drut Khayal with Bistar and Tanas.
- (2) They also learn to sing Thumri and Dadra.

Semester: V

Course Name: History of Music and Musicology - I

Course Code: BAHHMVC502

Course Type: Core (Theoretical)	Course Details: CC-12			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn about the history of Hindustani Classical Music from 18th to 20th century.
- (2) They also learn some musical definitions,
- (3) comparative study of Hindustani and karnataka music system and also details of Gharana.

Semester: V

Course Name: Stage Demonstration : Dhrupad and Khayal - I

Course Code: BAHHMVDSE501

Course Type: DSE	Course Details: DSEC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will be able to stage a 30 minutes performance of Dhrupad and Khayal.

Semester: V

Course Name: Raga Analysis

Course Code: BAHHMVDSE502

Course Type: DSE	Course Details: DSEC-2			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper students will learn to analyze Ragas in two groups.

Semester: VI

Course Name: Vilambit Kheyal and Drut Kheyal : Alap and Tanas - II

Course Code: BAHHMVC601

Course Type: Core (Practical)	Course Details: CC-13			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn three Vilambit Khayals, Drut Khayals with Bistar and Tanas in different Ragas.
- (2) Also they will learn some different Talas.

Semester: VI

Course Name: History of Music and Musicology - II

Course Code: BAHHMVC602

Course Type: Core (Theoretical)	Course Details: CC-14			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn about the differences between the Suddha Scale of Hindustani Music of the medieval and modern period.
- (2) They will also be exposed to detailed theoretical knowledge of Ragas and Talas.
- (3) They will also learn comparative Study of similar type of Talas and about the life and musical contributions of some renowned personalities.

Semester: VI

Course Name: Stage Demonstration : Khayal and Thumri - II

Course Code: BAHHMVDSE601

Course Type: DSE	Course Details: DSEC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper students will learn how to perform on stage.

Semester: VI

Course Name: Project Work

Course Code: BAHHMVDSE602

Course Type: DSE	Course Details: DSEC-4			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will be able to carry out a Project work related to Hindustani Classical Music (Vocal / Instrument).

COURSE LEARNING OUTCOMES IN GENERIC COURSES

Semester: I

Course Name: Fundamental Knowledge of Hindustani Music - I

Course Code: BAHHMVGE101

Course Type: GE	Course Details: GEC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will gain a basic knowledge like alankar swaramalika, Drut kheyal, Dhrupad and Dhamar.

Semester: II

Course Name: Fundamental Knowledge of Hindustani Music - II

Course Code: BAHHMVGE201

Course Type: GE	Course Details: GEC-2			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The learners will gain a deeper understanding of Drut kheyal, Swaramalika, Dhrupad and Dhamar.

Semester: III

Course Name: Advanced Knowledge of Hindustani Music

Course Code: BAHHMOVGE301

Course Type: GE	Course Details: GEC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will gain an advanced knowledge of drut khayal, swaramalika, dhrupad , dhamar and lakshangeet.

Semester: IV

Course Name: Project on Hindustani Music

Course Code: BAHHMOVGE401

Course Type: GE	Course Details: GEC-4			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will undertake Field Work related to Hindusthani Music.

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF EDUCATION**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BA PROGRAM IN EDUCATION

Course Learning Outcomes

Semester- 1st

Course Name: Introduction to Education

Course Code: BAPEDCC101

Course Type: C	Course Details: CC-1(1)/ CC-2(1)		L-T-P: 5-1-0	
Credit: 6	Full Marks:	CA Marks		ESE Marks
		Practical	Theoretical	Practical
			10	Theoretical
	50			40

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the meaning of Education
2. understand the types of Education
3. understand the agencies of Education
4. understand the nature of knowledge
5. understand the nature of values in society
6. understand the role of education in emerging Indian society

Semester- 2nd

Course Name: Philosophical Foundations of Education

Course Code: BAPEDCC201

Course Type: C	Course Details: CC-1(2)/CC-2(2)		L-T-P: 5-1-0	
Credit: 6	Full Marks:	CA Marks		ESE Marks
		Practical	Theoretical	Practical
			10	Theoretical
	50			40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. understand the meaning and relationship of Education and Philosophy
2. understand the meaning and features of child centric education

- 3.understand the concept of Indian philosophy
- 4.understand the concept of western philosophy
- 5.understand the contributions of great Indian educators
- 6.understand the contributions of great western educators

Semester- 3rd

Course Name: Educational Sociology

Course Code: BAPEDCC301

Course Type: C	Course Details: CC-1(3)/CC-2(3)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

- 1.understand the meaning and relationship of Education and Sociology.
- 2.understand the types and agencies of education.
- 3.understand the interrelation of school and society.
- 4.understand the sociological bases of education.
- 5.understand the constitutional provisions for education.
6. understand the concept and role of religion and culture.

Semester- 3rd

Course Name: Basics of Communication Skills

Course Code: BAPEDCSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After going through this course, the students will have the ability to-

- 1.understand the fundamental elements of communication
- 2.understand the process of communication

- 3.acquire listening skills
- 4.acquire reading skills
- 5.acquire writing skills
- 6.acquire speaking skills

Semester- 4th

Course Name: Psychological Foundations of Education

Course Code: BAPEDCC401

Course Type: C	Course Details: CC-1(4)/ CC-2(4)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the concept of Psychology
- 2.relate psychology with education
- 3.be acquaint with the concepts of growth and development, their different stages and aspects
- 4.understand the nature and theories of learning and how different factors affect it
- 5.be acquaint with the concepts of Intelligence, Creativity and Personality
- 6.know basic concept of teaching and its different methods

Semester- 4th

Course Name: Measurement in Education

Course Code: BAPEDCSE401

Course Type: SE	Course Details: SEC-2		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. Understand the concept of measurement
2. Know different types of evaluation
3. Understand different types of tools and techniques of assessment
4. Understand the characteristics of a good test
5. Know about data, data collection and data representation
6. Know about the treatment of data

Semester- 5th

Course Name: History of Education in Pre and Post-independent India

Course Code: BAPEDCDSE501

Course Type: DSE	Course Details: DSEC-1(1)/ DSEC-2(1)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. understand the education system of early British period in India
2. understand the influence of western education system in Indian context
3. understand different educational policies of India under British rule
4. understand the impact of colonial plan of education in India
5. understand the education system of post-independent India
6. understand different educational policies of post-independent India

Semester- 5th

Course Name: Educational Technology

Course Code: BAPEDCDSE502

Course Type: DSE	Course Details: DSEC-1(1)/ DSEC-2(1)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After going through this course, the students will have the ability to-

1. understand the concept of Educational Technology.
2. acquaint with the concepts of system approach to education.
3. know the idea of communication.
4. understand the details of instructional techniques.
5. develop the concept of different models of teaching

Semester- 5th

Course Name: Life Skill Education

Course Code: BAPEDCSE501

Course Type: SE	Course Details: SEC-3		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. Understand the concept of life skills including different types of skills;
2. know about the scope of life skill education;
3. know in detail about life skills and their importance in life;
4. learn how life skill education is taught with special reference to adolescence period;
5. know about the various modern teaching methods of education;
6. learn in detail about the various Life Skill Policies in India etc.

Semester- 5th

Course Name: Education for Sustainable Development

Course Code: BAPEDCSE502

Course Type: SE	Course Details: SEC-3		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. develop appreciation and understanding about the concepts the concept and components of sustainable development
2. help the student to understand the history, goals and challenges for sustainable development
3. help the student to understand the various dimension of sustainable development
4. enable the student to understand the education for sustainable development
5. enable the students understand the current issue of the sustainable development
6. help the student to understand the united nations' decade of education for a sustainable development

Semester- 5th

Course Name: Educational Thoughts and Ideas of Great Educators

Course Code: BAPEDCGE501

Course Type: GE	Course Details: GEC-1		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. know, understand and explain the contributions of eminent Indian and Western educators in the field of education in respect to Aims, Curriculum, Methods of Teaching, Discipline and Role of Teachers.

Semester- 6th

Course Name: Education of Special Children

Course Code: BAPEDCDSE602

Course Type: DSE	Course Details: DSEC-1(2)/DESC-2(2)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After going through this course, the students will have the ability to-

1. explain meaning, nature and causes of exceptionality;
2. elaborate Historical Development of special Education in India;
3. understand different types of special Education;
4. suggest the alternative or remedial educational provisions for special children;
5. understand concept of different types of special education

Semester- 6th

Course Name: Open and Distance Learning

Course Code: BAPEDCSE602

Course Type: SE	Course Details: SEC-4		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the ability to-

1. help the student to understand the basic concept of teacher education.
2. enable the students the historical perspective and development of teacher education in India.
3. understand the Teaching as a profession
4. help the student to understand teacher education programme at different levels
5. understand the various agencies in teacher education
6. make an idea about some major issues and problems of teacher education

Semester- 6th

Course Name: Guidance and Counselling in Education

Course Code: BAPEDCGE601

Course Type: GE	Course Details: GEC-2		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. develop appreciation and understanding about the concepts, types and agencies of guidance
2. help the student to understand the concept, technique and implications of counselling
3. enable the students the types and agencies of counselling
4. enable the student to understand the psychometric methods and techniques for guidance and counselling
5. help the student to understand guidance and services programme

Semester- 6th

Course Name: Inclusive Education

Course Code: BAPEDCGE602

Course Type: GE	Course Details: GEC-2		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. develop an understanding of the concept and philosophy of inclusive
2. understand education in the context of education for all
3. familiarize with the trends and issues in inclusive education
4. develop an attitude to foster inclusive education
5. develop an understanding of the role of facilitators in inclusive education
6. understand and appreciate the needs of such children in the society

**COURSE LEARNING OUTCOMES OF GENERIC ELECTIVE COURSES
FOR HONOURS STUDENTS OF OTHER DISCIPLINES**

Semester- 1st

Course Name: Yoga Education

Course Code: BAHEDCGE101

Course Type: GE	Course Details: GEC-1		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. acquaint with the concept of Yoga;
2. Understand the historical underpinnings of Yoga;
3. relate between Yoga and science;
4. understand Yoga as a means of personal and social upliftment
5. understand various forms of Yoga
6. practice a various guiding principle of Yoga etc.

Semester- 2nd

Course Name: Value and Peace Education

Course Code: BAHEDCGE201

Course Type: GE	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After going through this course, the students will have ability to-

1. Understand the meaning and concept of value education;
2. understand the concept of value and morality;
3. understand the necessity of values in schools;
4. understand the meaning and concept of peace education
5. understand the need of peace education;
6. understand the need of values in peace education etc.

Semester- 3rd

Course Name: Human Rights Education

Course Code: BAHEDCGE301

Course Type: GE	Course Details: GEC-3		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

On completion of this course the students will have ability to :

1. comprehends Human Rights education and its significance;
2. Understand the initiatives taken in the international level about Human Rights education;
3. Acquaint with the laid down human rights elements in the constitution of India;
4. Know the status of the vulnerable and disadvantaged sections of the society with regard to human rights;
5. familiar with the enforcement mechanisms of human rights in the society;
6. understand the diverse issues of Human Rights education etc.

Semester- 3rd

Course Name: Life Skill Education

Course Code: BAHEDCGE302

Course Type: GE	Course Details: GEC-3		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. Understand the concept of life skills including different types of skills;
2. know about the scope of life skill education;
3. know in detail about life skills and their importance in life;
4. learn how life skill education is taught with special reference to adolescence period;
5. know about the various modern teaching methods of education;
6. learn in detail about the various Life Skill Policies in India etc.

Semester- 4th

Course Name: Population Education

Course Code: BAHEDCGE401

Course Type: GE	Course Details: GEC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. understand the concept, need and importance of population education.
2. understand various terminologies concerned with population studies and factors responsible for population growth.
3. develop an awareness of the implications of population growth on various aspects of social functioning.
4. understand the benefits of population control and its impact.

Semester- 4th

Course Name: Women Education

Course Code: BAHEDCGE402

Course Type: GE	Course Details: GEC-4		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes: After going through this course, the students will have ability to-

1. understand the concept, need and importance of women education.
2. know the status of women education in British period and in present India.
3. know concepts of contribution of great educators for women education.
4. know the role of the Indian Constitution and different commissions for women education.
5. an insight into the constraints of women education in India.

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF ENGLISH

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
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KAZI NAZRUL UNIVERSITY

BA HONOURS IN ENGLISH

Semester	Course Name		Course Type	Course Code
I	British Poetry: Anglo-Saxon to Seventeenth Century		C	BAHENG101
	British Prose and Drama: Anglo-Saxon to Seventeenth Century			BAHENG102
II	Shakespeare		C	BAHENG201
	British Literature: Eighteenth Century			BAHENG202
III	British Romantic Literature		C	BAHENG301
	British Victorian Literature			BAHENG302
	Classical Literature: Indian and European			BAHENG303
	Actual Reporting and Content Writing	(Any One)	SE	BAHENGSE301
	Translation Skills			BAHENGSE302
IV	British Literature: The Early Twentieth Century		C	BAHENG401
	Indian Writing in English			BAHENG402
	Popular Literature			BAHENG403
	Communicative English	(Any One)	SE	BAHENGSE401
	Creative Writing			BAHENGSE402
V	Modern European Drama		C	BAHENG501
	American Literature			BAHENG502
	Literary Criticism	Any Two	DSE	BAHENG503
	Indian Literature in Translation			BAHENG504
	Travel Writing			BAHENG505
	Post World War II Literature			BAHENG506
VI	Postcolonial Literatures		C	BAHENG601
	Women's Writing			BAHENG602
	Literary Theory	Any Two	DSE	BAHENG603
	Partition Literature			BAHENG604
	Autobiography			BAHENG605
	Science Fiction and Detective Literature			BAHENG606

Semester wise Pool of Generic Elective Courses offered by this Discipline for other Honours Disciplines				
Discipline	Semester	Course Name		Course Code
ENGLISH	I	Contemporary India: Women and Empowerment		BAHENGGE101
	II	Indian English Literature		BAHENGGE201
	III	Literature and Gender		BAHENGGE301
	IV	Indian Literature	(Any One)	BAHENGGE401
		Academic Writing and Composition		BAHENGGE402

Pool of Communication Courses offered as Ability Enhancement Compulsory Courses				
Discipline	Semester	Course Name	Course Type	Course Code
English/MIL Communication	II	English Communication	AE	AECCE201

The specific objectives of the BA programme in English Literature (Honours) are to develop in the student the ability to demonstrable the following outcomes:

1. Disciplinary Knowledge of English Literature and Literary Studies
2. Communication Skills
3. Critical Thinking
4. Analytical Reasoning
5. Problem Solving
6. Research-Related Skills
7. Self-Directing Learning
8. Multicultural Competence
9. Values: Moral and Ethical, Literary and Human
10. Digital Literacy

The details are explained in the sections that follow.

Graduate Attributes

Disciplinary Knowledge

- a) ability to identify, speak and write about different literary genres, forms, periods and movements
- b) ability to understand and engage with various literary and critical concepts and categories
- c) ability to read texts closely, paying attention to themes, generic conventions, historical contexts, and linguistic and stylistic variations and innovations
- d) ability to understand appreciate, analyze, and use different theoretical frameworks
- e) ability to locate in and engage with relevant scholarly works in order to develop one's own critical position and present one's views coherently and persuasively
- f) ability to situate one's own reading, to be aware of one's position in terms of society, religion, caste, region, gender, politics, and sexuality to be self-reflexive and selfquestioning
- g) ability to understand the world, to think critically and clearly about the local and the global through a reading of literatures in translation and in the original, to be a located Indian citizen of the world
- h) ability to see and respect difference and to transcend binaries

Communication Skills

- a) ability to speak and write clearly in standard, academic English
- b) ability to listen to and read carefully various viewpoints and engage with them.
- c) ability to use critical concepts and categories with clarity

Critical Thinking

- a) ability to read and analyze extant scholarship
- b) ability to substantiate critical readings of literary texts in order to persuade others

c) ability to place texts in historical contexts and also read them in terms of generic conventions and literary history

Problem Solving

- a) ability to transfer literary critical skills to read other cultural texts
- b) ability to read any unfamiliar literary texts

Analytical Reasoning

- a) ability to evaluate the strengths and weaknesses in scholarly texts spotting flaws in their arguments
- b) ability to use critics and theorists to create a framework and to substantiate one's argument in one's reading of literary texts

Research-Related Skills

- a) ability to problematize; to formulate hypothesis and research questions, and to identify and consult relevant sources to find answers
- b) ability to plan and write a research paper

Teamwork and Time Management

- a) ability to participate constructively in class discussions
- b) ability to contribute to group work
- c) ability to meet a deadline

Scientific Reasoning

- a) ability to analyze texts, evaluating ideas and literary strategies
- b) ability to formulate logical and persuasive arguments

Reflective Thinking

ability to locate oneself and see the influence of location—regional, national, global—on critical thinking and reading

Self-Directing Learning

- a) ability to work independently in terms of reading literary and critical texts
- b) ability to carry out personal research, postulate questions and search for answers

Digital Literacy:

- a) ability to use digital sources, and read them critically
- b) ability to use digital resources for presentations

Multicultural Competence:

- a) ability to engage with and understand literature from various nations and reasons and languages
- b) ability to respect and transcend differences

Moral and Ethical Values:

- a) ability to interrogate one's own ethical values, and to be aware of ethical issues
- b) ability to read values inherited in literary texts and criticism vis a vis, the environment, religion and spirituality, as also structures of power

Leadership Readiness:

ability to lead group discussions, to formulate questions for the class in literary and social texts

Life-long Learning:

a) ability to retain and build on critical reading skills

b) ability to transfer such skills to other domains of one's life and work

Programme Learning Outcomes (BA Hons. English)

The programme learning outcomes relating to BA (Hons) degree programme in English:

☐ demonstrate a set of basic skills in literary communication and explication of literary practices and process with clarity

☐ demonstrate a coherent and systematic knowledge of the field of English literature and Bhasha literatures in English showing an understanding of current theoretical and literary developments in relation to the specific field of English studies.

☐ display an ability to read and understand various literary genres and stylistic variations and write critically

☐ cultivate ability to look at and evaluate literary texts as a field of study and as part of the wider network of local and global culture

☐ demonstrate a critical aptitude and reflexive thinking to systematically analyze the existing scholarship and expand critical questions and the knowledge base in the field of English studies using digital resources.

☐ display knowledge to cultivate a better understanding of values – both literary values that aide us in literary judgment and also values of life at all stages; apply appropriate methodologies for the development of the creative and analytical faculties of students, their overall development of writing, including imaginative writing.

☐ recognize employability options in English studies programme as part of skill development and as career avenues open to graduates in today's global world such as professional writing, translation, teaching English at different levels, mass media, journalism, aviation communication and personality development

☐ channelize the interests of the students and analytical reasoning in a better way and make more meaningful choices regarding career after completion of graduate programme

☐ to enable students to develop an awareness of the linguistic-cultural richness of India as an important outcome of English literary studies in India

BA PROGRAM IN ENGLISH

Semester	Course Name		Course Type	Course Code
I	Rhetoric and Prosody		C	BAPENG C101
II	Poetry		C	BAPENG C201
III	Fiction and Short Stories		C	BAPENG C301
	Phonetics and Phonology		SE	BAPENG SE301
IV	Fundamentals of Bhasa Literature		C	BAPENG C401
	Composition		SE	BAPENG SE401
V	English Literature and Gender	(Any One)	DSE	BAPENG DSE501
	English Literature and Ecology			BAPENG DSE502
	Communicative English	(Any One)	SE	BAPENG SE501
	Report Writing			BAPENG SE502
VI	Literature and Fine Arts	(Any One)	DSE	BAPENG DSE601
	Literature and Philosophical Thoughts			BAPENG DSE602
	Fundamentals of Creative Writing	(Any One)	SE	BAPENG SE601
	Translation Skills			BAPENG SE602

Semester wise Pool of Generic Elective Courses offered by this Discipline

Discipline	Semester	Course Name		Course Type	Course Code
ENGLISH	V	English Literature and Social Exclusion	(Any One)	GE	BAPENGGE501
		Film and Literature			BAPENGGE502
	VI	Literature and Myths	(Any One)		BAPENGGE601
		Fundamentals of Bhasa Literature			BAPENGGE602

Discipline	Semester	Course Name		Course Type	Course Code
MIL-I	I	Basic English Understanding	(Any One)	C	MILCE101
English I/MIL Communication	II	English Communication	(Any One)	AE	AECCE201
MIL-II	III	British Poetry	(Any One)	C	MILCE301

GRADUATE ATTRIBUTES

Disciplinary Knowledge:

- ability to understand, speak, read and write English both at the basic and advanced levels.
- ability to understand and engage texts with various linguistic, critical and creative concepts and categories
- ability to read texts closely, paying attention to linguistic and stylistic variations and innovations and also exploring themes, generic conventions and historical contexts
- ability to understand linguistic/pragmatic frameworks to appreciate literary texts and language use
- ability to locate and engage with relevant scholarly works in order to develop one's own critical position and present views coherently and persuasively
- ability to situate one's own reading in terms of society, religion, caste, region, gender, and politics
- ability to understand the world, to think critically and clearly about the local and the global through a reading of literatures in translation and in the original, to be a located Indian citizen of the world
- ability to see and respect difference and to transcend binaries

Communication Skills:

- ability to speak and write clearly in standard, academic English
- ability to listen to and read carefully various viewpoints and engage with them.
- ability to use critical concepts and categories with clarity

Critical Thinking:

- ability to read and analyse texts
- ability to place texts in historical contexts and be sensitive to their social relevance
- ability to substantiate critical readings of literary texts in order to persuade others

Problem Solving:

- ability to cope with complex language use
- ability to read any unfamiliar literary and non-literary texts

Analytical Reasoning:

- ability to evaluate the strengths and weaknesses in a literary text
- ability to substantiate one's argument through an enhanced critical and
- communicative ability

Research-Related Skills:

- ability to problematize and formulate research questions, and to identify and consult relevant sources to find answers
- ability to plan and write a research paper or assignment

Teamwork and Time Management:

- ability to participate constructively in classroom discussions
- ability to meet a deadline

Scientific Reasoning:

- ability to analyse texts, evaluating ideas and literary strategies
- ability to formulate logical and persuasive arguments

Reflective Thinking:

- ability to locate oneself and see its influence on critical thinking and reading
- ability to carry the implications of a text to life and vice versa

Self-directed Learning:

- ability to work independently in terms of reading literary, non-literary and critical texts
- ability to carry out personal research, postulate questions and search for answers

Digital Literacy:

- ability to use digital resources for gathering information
- ability to use digital resources for presentations

Multicultural Competence:

- ability to engage with and understand language used in literary texts from different regions
- ability to respect and transcend differences

Moral and Ethical Values:

- ability to interrogate one's own ethical values, and to be aware of ethical issues
- ability to read values inherited in literary texts *vis a vis* issues of environment, religion and spirituality, as also structures of power

Leadership Readiness:

- ability to lead group discussions
- ability to formulate questions for the class in literary, academic and social contexts

Life-long Learning:

- ability to retain and build on critical reading skills
- ability to infer, cherish and practise human values
- ability to transfer such skills in other domains of one's life and work

QUALIFICATION DESCRIPTORS

The qualification descriptors for the programme in English shall be five learning attributes such as understanding, use, communication, expansion, and application of subject knowledge with a clear understanding of one's location. This also involves an awareness on the students' part of differences pertaining to class, caste, gender, community, region, etc. in order that they can transcend these differences with transparency of purpose and thought. The key qualification descriptor shall be clarity of communication as well as ethical and social awareness. Each student should be able to

- a. *Demonstrate* a coherent and systematic knowledge and understanding of the field of literary and theoretical developments in the field of English Literary and Language

Studies. This would also include the student's ability to identify, speak and write about genres, forms, periods, movements and conventions of writing as well as the ability to understand and engage with literary-critical concepts, and varieties of language use for social communication.

- b. *Demonstrate* the ability to understand the role of literature and language in a changing world from the disciplinary perspective as well as in relation to its professional and everyday use.
- c. *Demonstrate* the ability to think and write clearly about one's role as a located Indian citizen of the world through a reading of literatures in English and English translation *Communicate* ideas, opinions and values—both literary values and values of life in all shades and shapes—in order to expand the knowledge of the subject and the language as it moves from the classroom to life at large.
- d. *Recognize* the scope of English language and literary studies in terms of career opportunities, employment and lifelong engagement in teaching, publishing, translation, communication, media, soft skills and other allied fields
- e. *Apply* subject-specific skills in language and literature to foster a larger sense of ethical and moral responsibility among fellow humans in order to see and respect differences in and among various species and life-forms and learn to transcend them.

Programme Learning Outcomes

The programme learning outcomes relating to BA/B Sc/B Com English CBCS students:

- Demonstrate a set of basic skills in literary and linguistic communication and explication of literary practices and process with clarity.
- Demonstrate a coherent and systematic knowledge of the field of English literature and Bhasha literatures translated into English, showing an understanding of the contemporary world.
- Cultivate ability to look at and evaluate the language of literary texts as a field of study and as part of the wider network of local and global culture by using digital resources.
- Display knowledge to cultivate a better understanding of values – both in the use of different language registers and literary forms and genres to arrive at transparent understanding of values of life at all stages.
- Recognize employability options in English literature and language studies programme as part of skill development and as career avenues open to graduates in today's global world such as professional writing, translation, teaching English at different levels, mass media, journalism, aviation communication and personality development
- To enable students to develop an awareness of the linguistic-cultural richness of India as an important outcome of English literary and language studies in India.

RANIGANJ GIRLS' COLLEGE

DEPARTMENT OF HINDI

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BA HONOURS IN HINDI

Course Learning Outcomes

Semester-I

Course Name: Hindi Sahitya Ka Itihas : Ritikal tak

Course Code: BAHHINC101

Course Type: Core (Theoretical)		Course Details: CC-1		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी 10वीं शताब्दी से अब तक के सामाजिक, सांस्कृतिक, राजनीतिक और विशेष रूप से साहित्यिक सन्दर्भों का ज्ञान प्राप्त कर सकेंगे।
2. हिन्दी साहित्य के विकासात्मक स्वरूप से परिचित हो सकेंगे
3. 11सौ वर्षों के हिन्दी साहित्य की प्रवृत्तियों से परिचित हो सकेंगे।
4. हिन्दी साहित्य के रचानाकारों और रचनाओं से परिचित हो सकेंगे।
5. अपभ्रंश, राजस्थानी, मैथिली, भोजपुरी, अवधी, ब्रज भाषा, खड़ी बोली आदि के विकास को समझ पाने में समर्थ होंगे।

Semester-I

Course Name: Aadikalin evam madhyakalin kavya

Course Code: BAHHINC102

Course Type: C (Theoretical)		Course Details: CC-2		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी हिंदी साहित्य के आदिकाल और मध्यकाल के विकास, प्रवृत्तियों, कविताओं और रचनाकारों की जानकारी प्राप्त करेंगे।
2. विद्यार्थी इसमें भारतीय कविता के अस्तित्व और भक्ति के तल के क्लासिकल रूप को जान सकते हैं।
3. विद्यार्थी आठ प्रतिनिध रचनाकारों की कुछ प्रमुख रचनाओं के पाठ को हृदयंगम कर सकेंगे।
4. आठ महत्वपूर्ण कवियों की रचनाओं की अंतर्वस्तु से परिचित हो सकेंगे।
5. भोजपुरी, मैथिली, अवधी, ब्रज भाषा की बानगियां विद्यार्थियों को यहां प्राप्त हो सकेगी।
6. हिन्दी की बोलियों की विविधता को समझ पाने में सक्षम हो सकेंगे।

Semester-I

Course Name: Hindi Cinema

Course Code: BAHHINGE101

Course Type: GE (Theoretical)	Course Details: GEC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. यह पेपर हिंदी सिनेमा के इतिहास, परम्परा, उसके वैविध्य पहलुओं, सिनेमा और समाज के संबंध और प्रभाव की जानकारी देगा। शोध कार्य में यह जानकारी महत्वपूर्ण होगी।
2. टेलीविज़न के हिन्दी चैनल के वैविध्य रूप, उसके प्रस्तुत कार्यक्रम की जानकारी, उसका मूल्यांकन और समाज पर उसके प्रभाव का ज्ञान होगा।
3. विद्यार्थी हिन्दी सिनेमा के विकास से परिचित हो सकेंगे।
4. समाज पर हिन्दी सिनेमा के पड़ रहे प्रभाव के विश्लेषण में सक्षम होंगे।
5. हिन्दी सिनेमा के गीत-संगीत की व्याप्ति की समझ विकसित होगी।

6. चार प्रतिनिधि हिन्दी फिल्मों के मूल्यांकन के माध्यम से सिनेमा के प्रति आलोचनात्मक दृष्टि विकसित होगी।

Semester-I

Course Name: Television ke Hindi Channel

Course Code: BAHHINGE102

Course Type: GE (Theoretical)		Course Details: GEC-1		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. यह पेपर हिंदी टेलीविजन चैनल के इतिहास, परम्परा, उसके वैविध्य पहलुओं, सिनेमा और समाज के संबंध और प्रभाव की जानकारी देगा। शोध कार्य में यह जानकारी महत्वपूर्ण होगी।
2. टेलीविजन के हिन्दी चैनल के वैविध्य रूप, उसके प्रस्तुत कार्यक्रम की जानकारी, उसका मूल्यांकन और समाज पर उसके प्रभाव का ज्ञान होगा।
3. विद्यार्थी टेलीविजन के अब तक के विकास को समझ पाने में समर्थ होंगे।
4. समाचार, मनोरंजन, अध्यात्म, खोज परक, बच्चों के चैनल की विविधता और उपयोगिता का विश्लेषण कर सकेंगे।
5. टेलीविजन के समाज पर पड़ रहे प्रभाव का मूल्यांकन कर सकेंगे।
6. सूचना और ज्ञान के स्रोत के रूप में टेलीविजन की उपयोगिता आंक सकेंगे।

Semester –II

Course Name: Hindi Sahitya Ka Itihas : Aadhunikaal

Course Code BAHHINC201

Course Type: Core (Theoretical)	Course Details: CC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी हिन्दी साहित्य की उत्पत्ति, विकास, प्रवृत्तियों और रचनाकारों की जानकारी प्राप्त करेंगे।
- 2) हिन्दी साहित्य के आधुनिक काल से परिचित करवाना।
- 3) आधुनिक काल के विभिन्न युगों का परिचय कराना।
- 4) आधुनिक काल के कवियों की उपादेयता से परिचित करवाना।
- 5) इस काल में विकसित होने वाली विधाओं से परिचित करवाना।

Semester –II

Course Name: Aadhunik Hindi Kavita : Chhayavad Tak

COURSE CODE : BAHHINC202

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1) भारतेंदु युग से छायावाद युग तक के कवियों का परिचय करवाना।
- 2) छायावाद युग तक के कवियों तथा काव्य-संग्रहों से परिचित करवाना।
- 3) छायावादी काल तक के कवियों के अवदान से परिचित करवाना।

Semester –II

Course Name: Rachanatmak Lekhan

COURSE CODE : BAHHINGE201

Course Type: GE	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. ☐☐☐☐ ☐☐☐☐☐ ☐☐ ☐☐☐☐ ☐☐☐☐
2. ☐☐☐☐ ☐☐☐ ☐☐☐☐☐
3. ☐☐☐☐, ☐☐ ☐☐☐☐☐ ☐ ☐☐☐☐☐☐
☐☐☐☐☐☐ ☐☐☐☐☐☐
4. ☐☐☐☐ ☐☐☐☐☐ ☐ ☐ ☐☐☐☐ ☐
☐☐☐☐☐☐ ☐☐☐☐

Semester –II

Course Name: Patkatha Tatha Samvad Lekhan

COURSE CODE : BAHHINGE202

Course Type: GE	Course Details: GEC-2		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1)पटकथा और संवाद लेखन से परिचित करवाना।
- 2)फीचर लेखन,टी.वी धारावाहिक तथा डॉक्यूमेंट्री के बीच के अंतर से परिचित करवाना।
- 3)संवाद कौशल को विकसित करना।

Semester-II

Course Name: Hindi Communication

COURSE CODE : AECCH201

Course Type: AE	Course Details: AECC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1) आधुनिक काल की विभिन्न साहित्यिक विधाओं से परिचित करवाना।
- 2) कविता, कहानी, निबंध तथा व्यंग्य साहित्य की महत्ता सिद्ध करते हुए इस क्षेत्र के महत्वपूर्ण साहित्यकारों से परिचित कराना।
- 3) इन सभी विधाओं की भाषागत विविधता से परिचित कराना।

Semester –III

Course Name : Bhasha Vigyan Aur Hindi Bhasha

COURSE CODE : BAHHINC301

Course Type: Core (Theoretical)	Course Details: CC-5			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी हिंदी भाषा के विकास क्रम और उसकी बोलियों की पूर्ण जानकारी प्राप्त कर सकेंगे।
2. विद्यार्थी हिंदी भाषा की ध्वनियों और समय-समय पर उन में हुए परिवर्तन को समझ सकेंगे।
3. विद्यार्थी राजभाषा, राष्ट्रभाषा और संपर्क भाषा के रूप में हिंदी भाषा के महत्व को समझ सकेंगे।
4. विद्यार्थी को हिंदी भाषा का समुचित और तर्कसंगत ज्ञान हो सकेगा।

COURSE CODE : BAHHINC302

Course Type: Core (Theoretical)	Course Details: CC-6			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		10	40

(After the completion of course, the students will have ability to):

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COURSE CODE : BAHHINC303

Course Type: Core (Theoretical)	Course Details: CC-7			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- [illegible]

Semester –III

Course Name : Vigyapan Aur Hindi

COURSE CODE : BAHHINSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

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Semester –III

Course Name : Social Media

COURSE CODE : BAHHINSE302

Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- [illegible]

Semester –III

Course Name: Anuvad

COURSE CODE: BAHHINGE301

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

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Semester-IV**Course Name: Prayojanamoolak Hindi****COURSE CODE : BAHHINC401**

Course Type: C	Course Details: CC-8		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical
		.....	10	.....

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- भाषा को शुद्ध रूप से पढ़ना, लिखना और बोलना सीखेंगे।
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Semester-IV**Course Name: Hindi Upanyas****COURSE CODE : BAHHINC402**

Course Type: C	Course Details: CC-9		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical
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Course Type: C	Course Details: CC-9		L-T-P: 5-1-0	

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

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2. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना
3. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना
4. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना

Semester-IV

Course Name: Hindi Kahani

COURSE CODE : BAHHINC403

Course Type: C	Course Details: CC-10			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना
2. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना
3. निम्नलिखित में से एक विषय चुनिए और उस पर एक निबंध लिखिए।
 (a) भारत में लोकतंत्र की स्थापना
 (b) भारत में लोकतंत्र की स्थापना

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Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. भाषा की बारीकियों को समझ सकेंगे ।
2. विद्यार्थी भाषा सीखने की सृजनात्मक प्रक्रिया को समझ सकेंगे ।

Semester-IV

Course Name: Sambhashan Kala

COURSE CODE: BAHHINSE401

Course Type: SE	Course Details: SEC – 2			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theore tical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी में अच्छे वक्ता के गुणों का विकास हो सकेगा ।
2. सम्भाषण की कला तथा उसके महत्व से परिचित हो पाएंगे ।
3. नामवर सिंह, चित्रा मुद्गल जैसे विशिष्ट रचनाकारों की सम्भाषण कला को पढ़ कर विद्यार्थी सम्भाषण की दक्षता हासिल कर पाएंगे ।

Semester-IV

Course Name: Karyalayi Hindi

COURSE CODE: BAHHINSE402

Course Type: SE	Course Details: SEC-2	L-T-P: 4 - 0 - 0
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Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theore tical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. कार्यालयी हिन्दी के स्वरूप और प्रयोग क्षेत्र को जान सकेंगे।
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Semester- V

Course Name: Bharatiya Kavyashastra

Course Code: BAHHINC501

Course Type: Core (Theoretical)	Course Details: CC-11			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1 . विद्यार्थियों को भारतीय काव्यशास्त्र की जानकारी प्राप्त होगी ।
- 2 . प्राचीन काव्यगत सिद्धान्तों और सम्प्रदायों की जानकारी के साथ-साथ काव्य-निर्माण की आवश्यक तत्त्वों का ज्ञान प्राप्त होगा ।
3. विद्यार्थी साहित्य की परिभाषा के साथ-साथ भारतीय काव्यशास्त्र साहित्य की परंपरा एवं काव्य-लक्षण पर भारतीय आचार्यों के मत-मतांतर से परिचित हो सकेंगे ।
4. काव्यशास्त्र के विभिन्न सम्प्रदायों की जानकारी होने पर विद्यार्थियों में काव्य - पाठ को समझने की क्षमता विकसित हो सकेगी ।

5. छात्र रस, अंलकार, रीति, ध्वनि, वक्रोक्ति आदि के अध्ययन से काव्य में इनका प्रयोग एवं उपयोगिता से परिचित हो सकेंगे।

Semester-V

Course Name: Pashchatya Kavyashastra

Course Code: BAHHINC502

Course Type: Core (Theoretical)	Course Details: CC-12			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी पश्चिमी परंपरा और विभिन्न पश्चिमी आलोचकों के विचारों सहित साहित्य-चिंतन की परंपरा से भी परिचित हो सकेंगे।
2. विद्यार्थियों में आलोचना-दृष्टि का विकास होगा।
3. प्लेटो, लॉजाइनस, टी. एस. इलियट, आई. ए. रिचर्डस के सिद्धांत के अध्ययन से विद्यार्थियों में विश्लेषण और सर्जनात्मक शक्ति का विकास हो सकेगा।

Semester –V

Course Name: Bharatiya Evam Pashchatya Rangamanch Siddhant

Course Code: BAHHINDSE501

Course Type: DSE (Theoretical)	Course Details: DSEC-1 & DSEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. पाठ्यक्रम अध्ययन करने के पश्चात विद्यार्थी नाटक, रंगमंच के विभिन्न प्रकार, हिंदी- नाट्यशास्त्र, नाट्य-लेखन के इतिहास का सम्पूर्ण ज्ञान प्राप्त कर सकेंगे।
2. विद्यार्थी रंगमंच के विविध पहलुओं जैसे संवाद-लेखन, पटकथा-लेखन, ध्वनि-व्यवस्था, प्रसाधन आदि में विशेषज्ञता हासिल करने की आधार-भूमि को प्राप्त कर पायेगा।
3. भारतीय एवं पाश्चात्य रंगमंच को पढ़कर छात्र रंगमंच से जुड़ी बारीकियों को समझ पाएंगे।

Semester –V

Course Name: Hindi Vyakaran

Course Code: BAHHINDSE502

Course Type: DSE (Theoretical)	Course Details: DSEC-1 & DSEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. व्याकरण का शुद्ध प्रयोग, शब्दों का ज्ञान, शुद्ध लेखन, व्यावहारिक प्रयोग छात्र सीख पाएंगे
2. भाषायी कौशल, वाचन, श्रवण, लेखन और पठन के गुणों को आत्मसात कर पाएंगे।
3. वाक्यों का शुद्ध चयन और सटीक प्रयोग सीख पाएंगे।

Semester –V

Course Name: Pustak Samiksha

Course Code: BAHHINDSE503

Course Type: DSE (Theoretical)	Course Details: DSEC-1 & DSEC-2		L-T-P: 5-1-0	

Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. पुस्तक-समीक्षा के माध्यम से समीक्षक पुस्तक या पुस्तक की रचनाओं, लेखक के रचनाकर्म को स्पष्ट करता है। इसके द्वारा पुस्तक समीक्षा के इतिहास से विद्यार्थी अवगत हो पाएंगे।
2. विद्यार्थी समीक्षा की अवधारणा के साथ-साथ हिंदी साहित्य में पुस्तक समीक्षा के इतिहास की परंपरा छात्र एवं छात्राएं परिचित हो सकेंगे।
3. पुस्तक-समीक्षा के माध्यम से पुस्तक के बारे में पाठकों को परिचित कराया जाता है। छात्र- छात्राएं में इसके माध्यम से आलोचनात्मक और तुलनात्मक विश्लेषण क्षमता का विकास हो सकेगा।

Semester –V

Course Name: Bharatiya Sahitya

Course Code: BAHHINDSE504

Course Type: DSE (Theoretical)	Course Details: DSEC-1 & DSEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. प्रत्येक साहित्य की अपनी विशेषताएं होती हैं। इस दृष्टि से भारत के विभिन्न भाषाओं का विद्यार्थी अध्ययन कर सकेंगे।
2. भारत बहुभाषा भाषी देश है किंतु भारत के विभिन्न सांस्कृतियों में एक प्रकार की सूत्रबद्धता है। इस प्रश्नपत्र के अध्ययन से विद्यार्थी उससे परिचित हो सकेंगे।

3. भारतीय साहित्य में भारत का बिम्ब एवं भारतीय मूल्यों की अभिव्यक्ति से जुड़ी बारीकियों को छात्र समझ पाएंगे।

Semester –V

Course Name : Hindi Bhashi Samaj Ka Sarvekshan

COURSE CODE : BAHHINDSE505

Course Type: DSE (Practical)	Course Details: DSEC-1&DSEC-2			L-T-P: 0 - 2 - 8	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes

After the completion of course, the students have ability to:

1. हिंदी भाषी समाज का सामाजिक, सांस्कृतिक, ऐतिहासिक एवं आर्थिक स्थितियों का ज्ञान प्राप्त होगा।
2. हिंदी भाषी समाज की विकास की प्रेरणा उत्पन्न होगी।
3. हिंदी भाषी समाज की समस्याओं को दूर करने की भावना उत्पन्न होगी।

Semester –VI

Course Name: Hindi Nibandh Tatha Anya Gadya Vidhayen

COURSE CODE: BAHHINC601

Course Type: Core (Theoretical)	Course Details: CC-13			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes :

After the completion of course, the students have ability to :

1. हिंदी गद्य के कथा साहित्य से भिन्न अन्य गद्य विधाओं का ज्ञान प्राप्त होगा।
2. विभिन्न हिंदी की कथेतर विधाओं के स्वरूप का ज्ञान होगा।
3. युगीन संदर्भ के आलोक में कथेतर गद्य विधाओं को जान सकेंगे।
4. इनके अध्ययन से विद्यार्थी व्यक्तियों, स्थानों, प्रकृति एवं पर्यावरण से परिचित हो सकेंगे।
5. गंभीर भाव, चिंतन, हास्य और मनोरंजन से जुड़कर लाभान्वित होंगे।

Semester –VI

Course Name : Hindi Aalochana

COURSE CODE : BAHHINC602

Course Type: Core (Theoretical)	Course Details: CC-14			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes :

After the completion of course, the students have ability to :

1. विद्यार्थियों में आलोचनात्मक विवेक एवं समीक्षात्मक दृष्टि का विकास होगा।
2. विद्यार्थियों में भाषा शिक्षण के संस्कारों का विकास होगा।
3. उत्तर पूर्व से संबंधित हिंदी आलोचकों के परिचय द्वारा राष्ट्रीय एकात्मक भाव का विकास एवं हिंदी की राजभाषा के रूप में स्वीकार्यता की पहचान होगी।

Semester –VI

Course Name: Lok-Sahitya

COURSE CODE : BAHHINDSE601

Course Type: DSE (Theoretical)	Course Details: DSEC-3 & DSEC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to :

1. लोक साहित्य की अवधारणा स्वरूप और संकलन के उद्देश्य का ज्ञान प्राप्त होगा।
2. विद्यार्थी वर्तमान वैश्वीकरण के युग में अपने अंचल विशेष के प्रभावी रूप से लेकर वैश्विक संदर्भ से जुड़ सकेंगे।
3. विद्यार्थियों को लोक साहित्य की भाव गंभीरता, संस्कृति, रूप और सहज अभिव्यक्ति का परिचय प्राप्त हो सकेगा।

Semester –VI

Course Name : Bharatiya Sahitya : Pathaparak Adhyayan

COURSE CODE : BAHHINDSE602

Course Type: DSE (Theoretical)	Course Details: DSEC-3&4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to :

1. प्रत्येक साहित्य की अपनी विशेषताएं होती हैं। इस दृष्टि से विद्यार्थी भारत की विभिन्न भाषाओं के साहित्य का अध्ययन कर सकेंगे।
2. भारत बहुभाषी देश है किंतु भारत के विभिन्न संस्कृतियों में एक प्रकार की सूत्रबद्धता है। इस प्रश्न पत्र के अध्ययन से विद्यार्थी उससे परिचित हो सकेंगे।
3. भारतीय साहित्य के स्वरूप का ज्ञान प्राप्त करेंगे।
4. भारतीय साहित्य में आज के भारत का बिंब का ज्ञान प्राप्त कर सकेंगे।

Semester –VI

Course Name: Hindi Rangamanch

COURSE CODE: BAHHINDSE603

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Semester –VI

Course Name : Hindi Sevi Sansthaon Ka Sarvekshan

COURSE CODE : BAHHINDSE605

Course Type: DSE (Practical)	Course Details: DSEC-3&4			L-T-P: 0-2-8	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes

After the completion of course, the students have ability to:

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BA PROGRAM IN HINDI

COURSE LEARNING OUTCOMES

Semester-I

Course Name: Hindi Sahitya Ka Itihas

Course Code: BAPHINC101

Course Type: Core (Theoretical)	Course Details: CC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी 10वीं शताब्दी से अब तक के सामाजिक, सांस्कृतिक, राजनीतिक और विशेष रूप से साहित्यिक सन्दर्भों का ज्ञान प्राप्त कर सकेंगे।
2. हिन्दी साहित्य के विकासात्मक स्वरूप से परिचित हो सकेंगे
3. 11सौ वर्षों के हिन्दी साहित्य की प्रवृत्तियों से परिचित हो सकेंगे।
4. हिन्दी साहित्य के रचानाकारों और रचनाओं से परिचित हो सकेंगे।
5. अपभ्रंश, राजस्थानी, मैथिली, भोजपुरी, अवधी, ब्रज भाषा, खड़ी बोली आदि के विकास को समझ पाने में समर्थ होंगे।

Semester-I

Course Name: Hindi Vyakaran Aur Sampreshan(MIL)

Course Code: MILCH101

Course Type: C	Course Details: CC-3(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी हिन्दी व्याकरण की समझ विकसित कर सकेंगे।
2. हिन्दी भाषा के शुद्ध उच्चारण और लेखन में सक्षम हो सकेंगे।
3. हिन्दी भाषा की संप्रेषणीयता से परिचित हो सकेंगे।
4. हिन्दी में परिचर्चा करने और साक्षात्कार लेने की क्षमता का विकास होगा।

Semester- II

Course Name: Madhyakalin Hindi Kavita

Course Code: BAPHINC201

Course Type:C	Course Details: CC-1(2)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1) मध्यकालीन सामाजिक, राजनीतिक, सांस्कृतिक एवं साहित्यिक परिदृश्यों से परिचित करवाना।
- 2) मध्यकालीन कवियों के साहित्यिक सामर्थ्य से अवगत कराना।
- 3) इस काल के कवियों की भाषाओं से परिचित करवाना।

Semester- II

Course Name: Hindi Communication

COURSE CODE : AECCH201

Course Type: AE	Course Details: AECC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- 1) आधुनिक काल की विभिन्न साहित्यिक विधाओं से परिचित करवाना।
- 2) कविता, कहानी, निबंध तथा व्यंग्य साहित्य की महत्ता सिद्ध करते हुए इस क्षेत्र के महत्वपूर्ण साहित्यकारों से परिचित कराना।
- 3) इन सभी विधाओं की भाषागत विविधता से परिचित कराना।

Semester-III

Course Name: Aadhunik Hindi Kavita

COURSE CODE- BAPHINC301

Course Type: Core(Theoretical)	Course Details: CC-1(3)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थी आधुनिक हिंदी कविता के विकास-क्रम को समझ सकेंगे।
2. विद्यार्थी आधुनिक हिंदी कविता के सामाजिक-सांस्कृतिक संदर्भों को समझ सकेंगे।
3. विद्यार्थियों में आधुनिक हिंदी कविता की संवेदना और शिल्प की समझ विकसित होगी।
4. विद्यार्थी साहित्य और समाज के अंतःसंबंध को बेहतर समझ सकेंगे।

Semester-III

Course Name: Hindi Bhasha Aur Sampreshan

COURSE DETAILS: MILCH301

Course Type: C	Course Details: CC-3(3)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. विद्यार्थियों में भाषा के व्यावहारिक पक्ष और उपयोग पक्ष की समझ विकसित होगी।
2. भाषिक कला के विभिन्न पक्षों को विद्यार्थी समझ सकेंगे।
3. भाषा-संप्रेषण के विविध पक्षों का ज्ञान विद्यार्थियों को होगा।
4. उच्चरित और लिखित भाषा के अंतर को विद्यार्थी समझ सकेंगे।

Semester-III

Course Name: Chalachitra Lekhan

COURSE CODE- BAPHINSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

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Course Type: SE	Course Details: SEC-2	L-T-P: 4 - 0 - 0
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Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. सम्भाषण कला के महत्व को समझ सकेंगे।
2. सम्भाषण के महत्वपूर्ण सिद्धांतों की जानकारी प्राप्त कर सकेंगे।
3. अच्छे वक्ता के गुणों को रेखांकित कर सकेंगे।

Semester-V

Course Name: Chhayavadottar Hindi Kavita

COURSE CODE- BAPHINDSE501

Course Type: DSE (Theoretical)		Course Details: DSEC-1(1)		L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

4. छायावादोत्तर युग की सामाजिक, सांस्कृतिक, आर्थिक एवं राजनीतिक परिस्थितियों एवं विसंगतियों से उपजे काव्यांदोलनों से विद्यार्थी परिचित होंगे।
5. इतिहास दृष्टि और लोकजीवन तथा प्रकृति से कविता के सरोकार को रेखांकित कर सकेंगे।
6. छायावादोत्तर युगीन चेतना का वैचारिक आधार और अभिप्राय स्पष्ट रूप से जान सकेंगे।

Semester-V

Course Name: Kabir

COURSE CODE- BAPHINDSE502

Course Type: DSE (Theoretical)	Course Details: DSEC-1(1)		L-T-P: 5 - 1 - 0
		CA Marks	ESE Marks

2. गद्य की इन विधाओं के अध्ययन से विद्यार्थी के पठन-कौशल का विकास होगा ।
3. सौंदर्यानुभूति की भावना विकसित कर सकेगा ।
4. गद्य की विभिन्न विधाओं की शब्दावली, भाषाभिव्यंजना आदि ग्रहण कर अपनी अभिव्यक्ति शक्ति का विकास कर सकेगा ।

Semester-V

Course Name: Prayojanmoolak Hindi

COURSE CODE- BAPHINGE502

Course Type: GE (Theoretical)	Course Details: GEC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. प्रयोजनमूलक हिंदी के अभिप्राय तथा उसकी परिव्याप्ति को विद्यार्थी जान पाएंगे ।
2. सरकारी पत्र, अर्ध-सरकारी पत्र, प्रतिवेदन, परिपत्र, निविदा आदि के प्रारूप तथा उदाहरण से अवगत कराया जाएगा ।
3. भारतीय राष्ट्रभाषा और राजभाषा के विकास में प्रयोजनमूलक हिंदी की उपयोगिता से अवगत हो पाएंगे ।

Semester-V

Course Name: Sarjanatmak Lekhan Ke Vividh Kshetra

COURSE CODE- BAPHINSE501

Course Type: SE (Theoretical)	Course Details: SEC-3			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. इस पाठ्यक्रम के अध्ययन से विद्यार्थियों में प्रकृति और परिवेश को समझने की दृष्टि विकसित हो सकेगी।
2. विद्यार्थियों की प्रतिभा में निखार आएगा और उनकी कल्पनाशक्ति विकसित होगी।
3. शिक्षा के क्षेत्र में नवीन आयामों का उद्घाटन कर सकेंगे।

Semester-V

Course Name: Anuvad Vigyan

COURSE CODE- BAPHINSE502

Course Type: SE (Theoretical)		Course Details: SEC-3		L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

1. इस पाठ्यक्रम को पढ़ने से विद्यार्थी अनुवाद की आवश्यकता, प्रकार और प्रमुख रूप का ज्ञान प्राप्त कर पाएंगे।
2. अनुवाद विज्ञान के विविध पहलुओं को समझ पाएंगे।
3. व्यावहारिक तौर पर अनुवाद का कार्य करने के लिए प्रेरित होंगे।

Semester-VI

Course Name: Aadhunik Bharatiya Kavita

COURSE CODE- BAPHINDSE601

Course Type: DSE (Theoretical)	Course Details: DSEC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to:

1. इस पाठ्यक्रम के द्वारा विद्यार्थी बांग्ला, उड़िया, उर्दू, पंजाबी आदि के कवि एवं उनके साहित्य से परिचित हो सकेंगे।
2. इस पाठ्यक्रम के द्वारा विद्यार्थी आधुनिक भारतीय भाषाओं की तुलनात्मक अध्ययन कर सकेंगे।

Semester-VI

Course Name: Suryakanta Tripathi 'Nirala'

COURSE CODE- BAPHINDSE602

Course Type: DSE (Theoretical)	Course Details: DSEC-1(2)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to:

1. सूर्यकांत त्रिपाठी निराला की कविताओं में देश प्रेम की भावना किस प्रकार प्रस्फुटित हुई है जानकारी प्राप्त कर सकेंगे।
2. निराला के जीवन संघर्ष का अध्ययन कर सकेंगे।
3. स्वाधीनता संग्राम के दिनों में निराला अपनी कविताओं के द्वारा किस प्रकार भारतवासियों में देश प्रेम की भावना जगा रहे थे इसकी जानकारी विद्यार्थियों को मिलेगी।

Semester-VI
Course Name: Hindi Cinema
COURSE CODE- BAPHINGE601

Course Type: GE (Theoretical)	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to :

1. इस पाठ्यक्रम में साहित्य और सिनेमा के अंतर्संबंध को समझा जा सकेगा।
2. हिंदी सिनेमा के इतिहास से विद्यार्थी परिचित होंगे।
3. हिंदी सिनेमा के विकास में हिंदी साहित्य के योगदान को रेखांकित किया जाएगा।
4. विद्यार्थी सिनेमा की कला और हिंदी साहित्य में निहित कलात्मक तत्वों की पहचान कर सकेंगे
5. पटकथा लेखन और फिल्म निर्माण की कला के बारे में जान सकेंगे।
6. विद्यार्थी अपने अर्जित ज्ञान का उपयोग निर्माता, लेखक और अभिनेता बनने में कर सकते हैं।

Semester-VI
Course Name: Computer Aur Hindi
COURSE CODE- BAPHINGE602

Course Type: GE (Theoretical)	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to:

- 1 विद्यार्थी कंप्यूटर पर देवनागरी लिपि में टाइप करना सीख सकेंगे।
- 2 हिंदी में वेब पेज बनाना सीख सकेंगे।
- 3 हिंदी में ईमेल पर संदेश भेजना सीख सकेंगे।
- 4 डेस्कटॉप पब्लिशिंग की जानकारी और अन्य संबन्धित जानकारी प्राप्त कर
- 5 हिंदी सॉफ्टवेयर का परिचय प्राप्त कर सकेंगे।
- 6 ऑनलाइन पत्र-पत्रिकाओं की जानकारी प्राप्त कर सकेंगे।

Semester-VI

Course Name: Bhasha Shikshan

COURSE CODE- BAPHINSE601

Course Type: SE (Theoretical)	Course Details: SEC-4			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to:

1. विद्यार्थी भाषा सीखने की सृजनात्मक प्रक्रिया को समझ सकेंगे।
2. भाषा की बारीकियों को समझ सकेंगे।
3. भाषा में हिंदी शिक्षण में अच्छे शिक्षक बन सकेंगे।
4. भाषाई दक्षता अर्जित करके फिल्मों में डबिंग, हिंदी गीत लेखन जैसे क्षेत्रों में कार्य कर सकेंगे।

Semester-VI

Course Name: Samachar Sankalan Aur Lekhan

COURSE CODE- BAPHINSE602

Course Type: SE (Theoretical)	Course Details: SEC-4			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretic al	Practical	Theoretic al
		.....	10	.....	40

Course Learning Outcomes

After the completion of course, the students have ability to:

1. समाचार लेखन में अभी रुचि विकसित होगी।
2. छात्र मीडिया के लिए महत्वपूर्ण व्यक्तियों के साक्षात्कार लेने में सक्षम हो सकेंगे।
- 3 समाचार के स्वरूप को समझ सकेंगे।

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF HISTORY

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

B.A (Honours) in History Course Learning Outcomes

SEMESTER-I

COURSE NAME: Greek and Roman Historians
COURSE CODE: BAHHISC101

Course Type: Core (Theoretical)	Course Details: CC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the student may have the ability to:

1. Understand how the history reconstructs the systematic account of the past and how this work started in Greece by the Logographers.
2. Distinguish between myth and history and understand the origin and development of full-fledged history writing by Herodotus and Thucydides.
3. Understand the development of Roman History by the Roman historians under the shadow of Greek Historiography and gradual development of history as a multidimensional subject.
4. Learn methodologies of history writing in the Greco-Roman world.

SEMESTER-I

Course Name: Early History of India (Proto history to 6th Century B.C.E)
Course Code: UGHISHC102

Course Code: CHM3012					
Course Type: Core (Theoretical)	Course Details: CC-2			L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of the course, the students will have the ability to:

1. Develop ideas about the history and historiography of ancient India and about the social, political, economic, religious, and cultural conditions of the period.
2. Know about the chronological changes from the idea of civilization to the concept of kingdoms.
3. Know about the ideas and institutions in early India, cults, doctrines, and metaphysics, aspects of the economy in the age of Buddha, and the cultural milieu.

4. Know about the details of prehistoric village life, farming, pastoral life, first urbanization, and Aryansettlements.
5. Know about ancient *Vara* and *Jati*, slavery, untouchability, women, various forms of marriage, education, language, literature, and science and technologyetc. in ancient India.

SEMESTER-I

Generic Elective Paper

Course Name: Theories of the Modern State

Course Code: BAHHISGE101

Course Type: Core (Theoretical)	Course Details: GEC-1		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will be able to:

1. Understand the importance of inter-disciplinary study, like this one, which incorporates themes on history, political ideas and institutions.
2. Trace the theories on the evolution of modern State through the historical transformations across the world
3. Take preparations for civil-service examinations and assess the significance of this study for further research and higher studies.

SEMESTER- II

Course Name: Mauryan and Gupta Empire

Course Code: BAHHISC 201

Course Type: Core (Theoretical)	Course Details: CC-3			L-T-P: 5-1-0	
Credit:6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. Know in detail about the formation of empires— from Mahajanpadas to kingdoms.
2. Learn about the formation of Mauryan Empire and all its aspects—polity, economy,

- society, and culture.
3. Knowing detail about the post-Mauryan Empires.
 4. Knowing detail about the rise and fall of the Gupta Empire, its political, economic and socio-cultural aspects.

SEMESTER-II

Course Name: Political History of Early Medieval India: 600 AD-1200 AD

Course Code: BAHHISC202

COURSE TYPE: Core (Theoretical)	COURSE DETAILS : CC-4		L-T-P : 5-1-0		
Credit :6	Full Marks : 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course learning outcomes:

After the completion of the course, the students will have the ability to:

1. Understand the ‘early medieval’ phase in the Indian history — shifting of political power from Pataliputra to Kanauj.
2. Learn about the political condition of eastern India, the Deccan, and south India during the early medieval period.
3. Know about the advent of the Turks and the changing political condition of north India.
4. Know about the state formation — nature and structure of feudalism—‘segmentary state’ — debate about ‘Third urbanization’.
5. Know about the Chola period — land revenue system, military organization, administration etc.

SEMESTER-II

GENERIC ELECTIVE-2

Course Name: Railways and Modern India

Course Code: BAHHISGE201

Course Type: GE (Theoretical)	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course learning outcomes:

After the completion of course, the students will have the ability to:

1. Understand the history of the transformation of Indian society and economy during the

colonial period

2. Trace the aspects of an interdisciplinary study between history and economics because the railways in modern India form a very important element of economic history
3. Understand the development of a new culture of communication that had revolutionary transformed Indian mind and nationalism
4. Take preparations for civil-service examinations and assess the significance of this study for further research and higher studies.

SEMESTER-III

Course Name: The Delhi Sultanate: 1206-1526

CE Course Code: BAHHISC301

Course Type: Core (Theoretical)	Course Details: CC-5			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of Course, the student may have the ability to:

1. Develop a comprehensive understanding to interpreting the Delhi Sultanate — foundation and development from the thirteenth through fifteenth century — the theories of kingship under Turkish rule.
2. Learn about the emergence of regional states — Vijayanagar Empire and Bahmani Sultanate in the Deccan and south India, and Ilyas Shahi and Hussain Shahi kingdoms in Bengal.
3. Know about Sufism and Bhakti Movements, art and architecture, and language and literature—social impact and regional features.

SEMESTER-III

Course Name: The Feudal Society in Europe

Course Code: BAHHISC302

Course Type: Core (Theoretical)	Course Details: CC-6			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of Course, the student may have the ability to:

1. Learn about the political history of medieval Europe — Carolingian rule and Ninth Century Renaissance—Saxon Empire.
2. Know how European society was affected by invasions of the Norsemen, Magyars,

Arabs and Saracens.

3. Gain knowledge about feudalism, its economy and society, emergence of towns, trade and commerce.
4. Know about the emergence of national Kingship in Germany and France.
5. Develop ideas about the changes in the field of religion and culture — Cluniac Reform, monasticism, crusades, Twelfth Century Renaissance.

SEMESTER-III

Course Name: The Mughal Empire: 1526-1707 CE

Course Code: BAHHISC 303

COURSE TYPE : Core (Theoretical)	COURSE DETAILS : CC-7			L-T-P : 5-1-0	
Credit :6	Full Marks : 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course learning outcomes:

After the completion of course, the students may have ability to:

1. Understand about the history and historiography of medieval India. The students will get a detailed analysis of Social, Political, Economic, Religious toleration and cultural conditions of the Mughal India.
2. Know about the Rajput Policy, Zamindars / mansabdars, agricultural production, Trade routes, during the Mughal India.
3. Know about Sulh-i-Kul Din-i-Ilahi etc.
4. Develop ideas about Mughal painting and architecture.

SEMESTER-III

Course Name: Socialist Thought: Origins and Development in the 19th Century
Course Code: BAHHISGE301

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will be able to:

1. Understand the history of origins and developments of socialist thought during the nineteenth century, from proto-socialist ideas of Anabaptists to John Stuart Mill's idea of cooperation, social justice and Fabian thought of Democratic Socialism. The students

are able to understand the multi-various dimensions of the development of socialist thought in 19th century.

2. Know about the emergence of socialist thought which is self-explanatory. From radical groups of England to the ideas of Thomas Moore and Rousseau reflects the idea of Equality instead of inequality. It initiated the ideas of Robert Owen, Saint Simon, Charles Fourier, i.e., Utopian Socialism.
3. Know that how and why ideas of scientific socialism developed by Karl Marx and Frederick Engels. The paper focused on the foundation of Marxism, Marx's critique of capitalism, Lenin and further development of revolutionary ideology, state and party.
4. Raise questions about the inequality, about socialism or social justice, about democratic socialism for the betterment of human being and progress of the human society.

SEMESTER- III

Course Name: Life and Thought of Rabindranath Tagore

Course Code: BAHHISGE302

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will develop ideas about:

1. Recollections of Tagore's childhood.
2. Tagore's concept of westernization of the Indian society.
3. Nationalism and Swadeshi Samaj.
4. Tagore's focus on the building of Shantiniketan ashrama, his realization after the First World War, differences in the concept of Western and Indian Nationalism.
5. The impact of the Jallianwallabag massacre and Tagore's concept of Universalism.
6. The impact of the Second World War on Tagore's concept of civilization.

SEMESTER-III

Course Name: Perspectives on Economic Planning in India: 1930s-1990s
Course Code: BAHHISGE303

Course Type: GE (Theoretical)	Course Details: GEC-3		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		.....	10	..... 40

Course Learning Outcomes:

1. After the completion of course, the students will have the ability to:
2. Understand the history of the transformation of Indian economy from colonial to postcolonial period
3. Trace the aspects of economic reconstruction of India during the era of decolonization, cold war and reform
4. Take preparations for civil-service examinations and assess the significance of this study for further research and higher studies.

SEMESTER- III

SKILL ENHANCEMENT COURSE

Course Name: Archaeology and Museum Making in Colonial India
Course Code: BAHHISSE301

COURSE TYPE : SE (Theoretical)	COURSE DETAILS : SEC - 1		L-T-P : 4-0-0	
Credit : 4	Full Marks : 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. The course is solely intended to highlight the history and the origins of the developments of archaeology in Indian in twentieth Century. They will gain knowledge about archaeology.
2. The course aims to studying the history of the Archaeological explorations, excavations and conservation and the creation of heritage sites. They will develop knowledge about the Public archaeology and popularization of archaeological sites and Archaeology in travel writings.
3. Students will also be able to know that how and why Archaeology and the Museum Movement in India started. And how the Indian Museum, the Provincial museums and the local museums are growing up and the Background to the formation of the National Museum

SEMESTER-III
SKILL ENHANCEMENT COURSE
Course Name: Literature and History in Colonial India: Select
Themes Course Code: BAHHISSEC302

COURSE TYPE : SE (Theoretical)	COURSE DETAILS : SEC - 1			L-T-P : 4-0-0	
Credit :4	Full Marks :50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

1. After the completion of course, the students may have ability to:
2. Understand the importance of inter-disciplinary study, which incorporates themes on literature and history.
3. Know about the sense of history in pre-colonial period as part of literature and the concept of ‘mythic time’ and historical time.’
4. Origin of a new genre of literature in Bengal and some other parts of India
5. Know about Bankim Chandra Chattopadhyay’s idea of nationalism; Rabindranath Tagore’s idea of nationalism and universalism; Saratchandra Chattopadhyay’s idea of Indian women in public space; Satinath Bhaduri’s notion of the role of the subaltern in the context of the Gandhian Movement etc.
6. Take preparations for competitive examinations and assess the significance of this study for future research and higher studies.

SEMESTER-IV
Course Name: Renaissance and Reformation in Europe: 15th-16th Century
Course Code: BAHHISC401

COURSE TYPE : Core (Theoretical)	COURSE DETAILS : CC -8			L-T-P : 5-1-0	
Credit : 6	Full Marks : 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course learning outcomes:

After the completion of course, the students may have ability to:

1. Understand the political system in early modern Europe collapse of feudalism and the changing economic life in the 15th and 16th century.

2. The students will be able to know about renaissance and the origins of humanism – The impact of humanism on art, education and political thought.
3. They will get to know about Martin Luther and the reformation.
4. Understand about renaissance science and the emergence of a secular culture.

SEMESTER- IV

Course Name: The French Revolution and Napoleon Bonaparte
Course Code: BAHHIISC402

Course Type: Core (Theoretical)	Course Details: CC-9		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

1. After the completion of course, the students may have ability to:
2. The students will be able to know in detail about:
3. Historiography of the French Revolution and the political, Socio-economic condition of France.
4. Phases of the French Revolution.
5. Rise of Napoleon and the condition Europe at that time.
6. The Vienna Congress, Metternich and the restoration of the old order.

SEMESTER-IV

Course Name: Nineteenth Century Revolutions in Europe
Course Code: BAHHISC403

Course Type: Core Theoretical	Course Details: CC-10			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. Nationalistic zeal of the people of Europe
2. The impact of the French revolution on European society and people in the nineteenth century
3. The Greek War of Independence against the Ottoman Empire
4. The end of 'Metternich system' and the revolutions in France in 1830 and 1848 — revolts

of people of central and Western Europe for their political and social rights — changes in political structure and social inequalities.

5. Changing nature of European economy from agricultural economy to industrial economy — Industrialization and the emergence of working class — movements and ideology in the nineteenth century
6. Unification movements in Germany and Italy — nationalism in the Balkans and the role of European big powers
7. Historical events that formed the backdrop of contemporary Europe

SEMESTER- IV

Course Name: Caste in Modern India till 1950s

Course Code: BAHHISGE401

Course Type: GE (Theoretical)	Course Details: GEC-4		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. Themes and Approaches to understand the caste system.
2. Caste system during colonial period.
3. Classification and differentiation with respect to class and caste system in India.
4. Social and cultural interchange.
5. Gandhi and Ambedkar on caste system.
6. Politics in caste system.

SEMESTER-IV

Course Name: Science and Empire: 1784-1947

CE Course Code: BAHHISGE401

Course Type: GE (Theoretical)	Course Details: GEC-4		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. History and development of science under the Colonial Empire and recent Historical Debates/ Discourse/ Trajectories and Fundamental Research in Science in India in the

colonial period.

2. Various science related organizations like the Botanical Garden, Medical Colleges, Calcutta School of Tropical Medicine, Bose Institute, Indian Institute of Science etc.
3. The response by Mahatma Gandhi and Jawaharlal Nehru towards Science and Empire built by the British

SEMESTER-IV

Course Name: Visual and Performative Culture in Modern Bengal: 1795-1955 CE

Course Code: BAHHISGE403

Course Type: GE (Theoretical)	Course Details: GEC-4		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. 19th and 20th century Bengali culture — Emergence of Bengali middle class, modernity, urban, subaltern and folk culture — Modern Indian society and culture.
2. Explain the historical events from different multidimensional approach — cultural and sociological.
3. Understand popular cosmopolitan culture in the context of globalization.
4. Develop knowledge about our cultural heritage, its nature, and transformation.

SEMESTER-IV

Course Name: The Making of Indian Foreign Policy: 1947-1998 CE

Course Code: BAHHISSE401

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		.....	10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the trajectories of the making of Indian foreign policy during the post-independent period
2. Trace the aspects of transformation of Indian foreign policy with the interdisciplinary

aspects of international relations

3. Take preparations for civil service examinations and assess the significance of this study for further research and higher studies.

SEMESTER-IV

Course Name: Colonial Science in India: Institutions and Practices

Course Code: BAHHISE402

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

1. After the completion of course, the students will have ability to:
2. Know the status of the study of science and scientific institutions in colonial India— problems and perspectives.
3. Understand the relation between science and colonial explorations, science and Orientalism.
4. Develop ideas about some Indigenous scientific personalities and their work, and the intersection of science and nationalism

SEMESTER-V

Course Name: Colonial Impact on Indian Economy and Society: 1757-1900

CE Course Code: BAHHISC501

Course Type: Core (Theoretical)	Course Details: C-11		L-T-P: 5-1-0	
Credit: 06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to learn about:

1. Mode of operation of trade during colonial period.
2. Changes with respect to land and agriculture.
3. Industrialization in the modern period.
4. Caste and ethnology in colonial India.

5. Reformism and Revivalism in colonial India.
6. Islamic reforms in India.

SEMESTER-V

Course Name: Peasant and Tribal Uprisings in Colonial India: 19th Century
Course Code: BAHHISC502

Course Type: Core (Theoretical)	Course Details: C-12		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Know about the early colonial rule, revenue operations, revenue demands, and several settlement systems.
2. Know the peasant movements in Bengal, Malabar and the religious appeal for the liberation of a region or an ethnic group under a new form of government.
3. Develop ideas of the various tribal movements in pre-1857 western and eastern India.
4. Know about the revolutionary potential of Indian peasantry as assessed by historians and other social scientists

SEMESTER-V

Course Name: Europe in the Ancien Regime
Course Code: BAHHISDSE501

COURSE TYPE : DSE (Theoretical)	Course Details: DSEC1&2		L-T-P : 5-1-0	
Credit :6	Full Marks :50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Know about the political system in 18th century Europe.
2. Understand about the overseas empires and the Trading companies.
3. Develop ideas about 'Enlightened Despotism', society and economy, agriculture and commerce, scientific revolution and the idea of progress.
4. Take preparations for competitive examinations.

SEMESTER-V

Course Name: Modern Transformation of Japan: c.1850-1945 CE

Course Name: BAHHISDSE502

Course Type: DSE (Theoretical)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50.	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the knowledge about:

1. The situation of pre-Meiji era Japan.
2. Transition of Japan in the Meiji era: Modernization—social, economic, political and military reforms
3. Rise of political parties and the Meiji Constitution
4. Satsuma Rebellion and Popular Rights Movement
5. Emergence of Japan as an imperial power — Japan's role in international politics — wars and alliances — participation in World War I
6. Japan between the two world wars — Manchurian Crisis—failure of the democratic system — rise of militarism in the 1930s-40s
7. Japan and World War II— from Pearl Harbour to Hiroshima and Nagasaki.

SEMESTER-V

Course Name: Modern Transformation of China: 1839-

1949 CE Course Name: BAHHISDSE503

Course Type: DSE (Theoretical)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Enrich themselves by getting idea about the pre-colonial-traditional Chinese society, economy, religion, state and bureaucracy (a unique system in a feudal structure).
2. Obtain knowledge about the history of transformation of feudal China to the People's Republic of China.
3. Understand that how the British and other European powers made inroads in the 'Chinese Wall' and taking advantage of most favored country with the help of their weapons of capital and technology.
4. Develop ideas about people's revolt, reforms of the Manchu dynasty during the last half

of the 19th century and first half of the 20th century.

5. Know the foundation of the CCP, conflict between KMT and CCP, and two world wars, all events leading to the formation of Peoples Republic in China.
6. Acquire knowledge about the real nature of imperialism and the inner strength of the Chinese peoples' struggle for independence—uniqueness of the form of their struggle.

SEMESTER-VI

Course Name: War and Diplomacy: 1914 - 1945 CE

Course Name: BAHHISC601

Course Type: Core (Theoretical)	Course Details: CC-13		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to understand:

1. The period between the two World Wars— changes in socio-economic and political atmosphere of 20th century
2. The Bolshevik Revolution of Russia that gave birth to a new idea of socialism.
3. The emergence of Asia as a powerful continent between the two World Wars.
4. Changes in the structure of power politics in Asia and Latin America during the post First World War period.
5. Theories and ideas like new economic policy, socialism, liberalism, fascism, Nazism.
6. Contemporary world history

SEMESTER-VI

Course Name: Modern Nationalism in India: 1885 - 1947

CE Course Code: BAHHISC602

Course Type: C (Theoretical)	Course Details: CC-14			L-T-P:4-0-4	
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to understand:

1. Historiography of Indian Nationalism and its origin.
2. Gandhian mass movement in Indian Nationalism.

3. Other nationalistic movements.
4. Communalism and the partition of India.

SEMESTER- VI

Course Name: Russia in Transformation: c.1850-1945 CE

Course Name: BAHHISDSE601

Course Type: DSE (Theoretical)	Course Details: DSEC-3&4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50.	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to understand:

1. Background, socio-economic and political history of Czarist Russia and its transformation to a first socialist country of the world.
2. History of world's oldest autocratic feudal country with its backward economy, society and culture—the Russian population comprised with various nationalities with its various language, religion and culture.
3. Russia's agriculture-based economy and its dependence on 'serfdom'—reform to emancipate the 'serfs'.
4. Emergence of Russian Intelligentsia, Westernizers, the Populist and Social Democrats—The reign of Nicholas II which had witnessed two revolutions, revolutions of 1905 and 1917.
5. Causes and nature of the Bolshevik revolution and establishment of Soviet Democracy under the leadership of Lenin.

SEMESTER-VI

Course Name: Women and Social Change in the Nineteenth

Century Course Name: BAHHISDSE602

Course Type: DSE (Theoretical)	Course Details: DSEC-3&4		L-T-P:5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Socio-economic changes and women in contemporary Europe.

2. Position of women in nineteenth century India and efforts for their modernization.
3. Emergence of women's writings in the new reformed culture of India and their role in nationalist movement
4. Female education.
5. Emergence of women's organizations.
6. Various marriage acts and women.
7. Life and contributions of the professional women.

SEMESTER-VI

Course Name: Pre-Colonial South East Asia

Course Name: BAHHISDSE603

COURSE TYPE: DSE (Theoretical)	COURSE DETAILS : DSEC			L-T-P : 5-1-0	
Credit : 6	Full Marks : 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course learning outcomes:

After the completion of course, the students may have ability to:

1. Understand the importance of inter-disciplinary study.
2. Know about the state system, early kingdoms and cultural diversity of Pre-colonial South East Asia.
3. Know about economy, religion, international trade and commercial expansion of pre-colonial south East Asia.
4. Take preparations for competitive examinations.

SEMESTER –VI

DISCIPLINE SPECIFIC ELECTIVE COURSE

Course Name: International Relations: 1945-1991

CE Course Code: BAHHISDSE604

COURSE TYPE :DSE (Theoretical)	COURSE DETAILS : DSEC				L-T-P : 5-1-0	
	Full Marks : 50	CA Marks		ESE Marks		
		Practical	Theoretical	Practical	Theoretical	
			10		40	

Course learning outcomes:

After the completion of course, the students may have ability to:

1. Understand the importance of inter-disciplinary study.
2. Know about the origin of the cold war, its ideology and emergence of American and Soviet Block.
3. Know about economic and military alliance: NATO, SEATO, COMECON, and Warsaw Pact.
4. Understand about Third world and its ideology, organization: OPEC, SAARC, ASEAN etc.

B.A. (Program) in History Course Learning Outcomes

SEMESTER-I

Course Name: Ancient

India Course Code:

BAPHISC101

Course Type: Core (Theoretical)	Course Details: CC-1		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Know in detail about the Harappan civilization, the Vedic age and later Vedic age and the formation of states and its structure.
2. Know about the details of Ancient Town planning, the Vedic Literature, Society, Economy and Polity, and they will gain knowledge to differentiate between the early and later Vedic ages.
3. Learn in detail about the Mauryan Empire, the Gupta Empire and the Indian scenario after the Guptas.

SEMESTER-II

Course Name: Medieval

India Course Code:

BAPHISC102

Course Type: Core (Theoretical)	Course Details: CC-2		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. The period from 712 AD to 1707 AD in the history of India marks the Medieval Period and students of the history will get knowledge in details and understands the importance. India saw the arrival of Muslims at this time. Initially the Arabians came and controlled the Sindh Province. Later on Turkish and Mughals following the example of the Arabians laid their steps in India. Muslims ventured into India with the aim of acquiring India's wealth, but under Md. Ghori's leadership the Turkish started to dominate and rule India.
2. The reign of Qutubuddin Aibek from 1206 marks the start of Sultanate period. Later in the year 1527, Mughal warrior, Babar, defeated Ibrahim Lodi and established the Mughal dynasty in India.

- Emperor Akbar was the greatest ruler of this dynasty and under whose leadership Mughals expanded their control all over India.
- The students will learn in detail how the Delhi Sultanate and the Mughal rule had a great impact on Indian culture, society, socio-economic structure and politics as well. Developments and synthesis of Hindu-Muslim culture was the greatest contribution of this period. India has seen few renowned preachers during this period as a result of the Sufi and Bhakti Movement. Not only had that, during this period Art and architecture flourished at its zenith. Indo-Muslim style was its one of the impacts.

SEMESTER-III

Course Name: Colonial India: Economy and Society

Course Code: BAPHISC301

Course Type: Core (Theoretical)	Course Details: CC-3		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- The students will learn about colonial State institutions and ideologies, Colonial Economic interests, Company's Commerce, Mercantilism to Free trade, Deindustrialisation and Drain of Wealth
- The students will learn about land Settlements and agricultural change, Commercialisation of Agriculture
- Modern Industrialisation and Long-term Constraints
- Census and Caste, Colonial ethnology, Sanskritisation, Westernisation and Social reform like Brahma Samaj & Parthana Samaj
- Reformism and Revivalism that includes The Arya Samaj and Ramkrishna Vivekananda Movement.
- Islamic reform in India, The Reformers and the Orthodox

SEMESTER- III
SKILL ENHANCEMENT COURSE
Course Name: Literature and History in Colonial
Bengal Course Code: BAPHISSEC301

Course Type: Core (Theoretical)	Course Details: CC-2		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the importance of inter-disciplinary study, which incorporates themes on literature and history.
2. Origin of a new genre of literature in Bengal and some other parts of India
3. Know about Bankim Chandra Chattopadhyay's idea of nationalism; Rabindranath Tagore's idea of nationalism and universalism; SaratachandraChattaopadhyay's idea of Indian women in public space; SatinathBhaduri's notion of the role of the subaltern in the context of the Gandhian Movementetc.
4. Take preparations for competitive examinations and assess the significance of this studyfor future research and higherstudies.

SEMESTER-IV
Course Name: National Movements in India: 1885-1947 CE
Course Code: BAPHISC401

Course Type: Core (Theoretical)	Course Details: CC-4		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Historiography of Indian Nationalism and itsorigin.
2. Gandhian mass movement in IndianNationalism.
3. Other nationalisticmovements.
4. Riots of communalism and the partition ofIndia.

SEMESTER- IV
SKILL ENHANCEMENT COURSE
Course Name: Indian Foreign Policy: 1947-1998 CE
Course Code: BAPHISSEC401

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 5-1-0		
Credit:04	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

1. After the completion of course, the students will have ability to:
2. Understand the trajectories of the making of Indian foreign policy during the post-independent period
3. Trace the aspects of transformation of Indian foreign policy with the interdisciplinary aspects of international relations
4. Take preparations for civil-service examinations and assess the significance of this study for further research and higher studies.

SEMESTER-V
DISCIPLINE SPECIFIC ELECTIVE
Course Name: Renaissance and Reformation in the West
Course Code: BAPHISDSE501

Course Type: DSE (Theoretical)	Course Details: DSE-1		L-T-P: 5-1-0		
Credit:06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. Understand the political system in early modern Europe collapse of feudalism and the changing economic life in the 15th and 16th century.
2. The students will be able to know about renaissance and the origins of humanism – The impact of humanism on art, education and political thought.
3. They will get to know about Martin Luther and the reformation.
4. Understand about renaissance science and the emergence of a secular culture.

SEMESTER-V
DICIPLINE SPECIFIC ELECTIVE
Course Name: Europe in the Eighteenth
Century Course Code: BAPHISDSE502

Course Type: DSE (Theoretical)	Course Details: DSE-2		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students may have ability to:

1. The students will be able to know about the political system in 18th century Europe.
2. Understand about the overseas empires and the Trading companies.
3. They will get to know about–Enlightened Despotism, society and economy, agriculture and commerce, scientific revolution and the idea of progress.
4. Take preparations for competitive examinations.

SEMESTER-V
Generic Elective Paper
Course Name: Life and Thought of Rabindranath Tagore
Course Code: BAPHISGE501

Course Type: GE (Theoretical)	Course Details: GE-1		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

The students will be able to know in detail about:

1. Recollections of Tagore's childhood.
2. Tagore's concept of westernization of the Indian society.
3. Nationalism and Swadeshi Samaj.
4. Tagore's focus on the building of Shantiniketan ashrama—his realization after the First World War—differences in the concept of Western and Indian Nationalism.
5. The impact of the Jalianwalabag massacre and Tagore's concept of Universalism.
6. The impact of the Second World War on Tagore's concept of civilization.

SEMESTER-V
SKILL ENHANCEMENT COURSE
Course Name: Archaeology and Museum Making in Colonial India
Course Code: BAPHISSEC501

Course Type: SE (Theoretical)	Course Details: SEC-3		L-T-P: 5-1-0	
Credit:04	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course and Learning Outcomes:

After the completion of course, the students will have ability to:

1. The course is solely intended to highlight the history and the origins of the developments of archaeology in Indian in twentieth Century. They will gain knowledge about archaeology.
2. The course aims to studying the history of the Archaeological explorations, excavations and conservation and the creation of heritage sites. They will develop knowledge about the Public archaeology and popularization of archaeological sites and Archaeology in travel writings.
3. Students will also be able to know that how and why Archaeology and the Museum Movement in India started. And how the Indian Museum, the Provincial museums and the local museums are growing up and the Background to the formation of the National Museum

SEMESTER-VI
Course Name: Modern Europe: 1789-1914 CE
Course Code: BAPHISDSE601

Course Type: DSE (Theoretical)	Course Details: DSE-3		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will be able to:

1. Understand the period between the French revolution and First World War and how the French Revolution brought vast transition in the socio-economic and political structure of France.
2. Develop idea about how Napoleon Bonaparte spread the ideas and ideology of French Revolution on the whole of Europe, which led to the conflict between ideas of progressiveness and ideas of reactions.
3. Get to know about the emergence of nationalism in Europe, with special reference to the unification movements in Italy and Germany.

4. Know the ideas of Liberalism—how New Economic Policy and socialism developed—the battle of ideologies that led to the World War— Changes in modernEurope.

SEMESTER-VI

**Course Name: Post-World War II
Politics Course Code: BAPHISDSE602**

Course Type: DSE (Theoretical)	Course Details: DSE-4		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course Learning Outcomes:

After the completion of course, the students will be able to:

1. Understand the importance of inter-disciplinary study.
2. Know about the origin of the Cold War, its ideology and emergence of American and Soviet Blocs.
3. Know about economic and military alliances: NATO, SEATO, COMECON and Warsaw Pact.
4. Know about the crisis in East Europe and South-West Asia.
5. Understand about Third world and its ideology, organization: OPEC, SAARC, ASEAN etc.
6. Know how the Soviet bloc collapse and disintegrate.

SEMESTER-VI

Generic Elective Paper

**Course Name: Visual and Performative Culture in Bengal: 1795-1947 CE
Course Code: BAPHISGE601**

Course Type: GE (Theoretical)	Course Details: GE-2		L-T-P: 5-1-0	
Credit:06	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
			10	40

Course and Learning Outcomes:

Students will be able to know in detail about:

1. 19th and 20th century Bengali culture — Emergence of Bengali middle class, modernity, urban, subaltern and folk culture — Modern Indian society and culture.
2. Explain the historical events from different multidimensional approach — cultural and sociological.
3. Understand popular cosmopolitan culture in the context of globalization.
4. Develop knowledge about our cultural heritage, its nature, and transformation.

SEMESTER VI
SKILL ENHANCEMENT COURSE
Course Name: Colonial Science in India: Institutions and Practices
Course Code: BAPHISSEC601

Course Type: SE (Theoretical)	Course Details: SEC-4		L-T-P: 5-1-0		
Credit:04	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Know the status of the study of science and scientific institutions in colonial India — problems and perspectives.
2. Understand the relation between science and colonial explorations, science and Orientalism.
3. Develop ideas about some Indigenous scientific personalities and their work, and the intersection of science and nationalism

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF NAZRUL SANGEET**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BA HONOURS IN NAZRUL SANGEET

COURSE LEARNING OUTCOMES

Semester: I

Course Name: Basic Knowledge of Hindustani Classical Music

Course Code: BAHNZSC101

Course Type: Core (Practical)	Course Details: CC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) Students will learn about the basic knowledge of music like - Sudha - swara, Vikirita - swara, Palta, Alankar.
- (2) They will learn about the basic knowledge of Ten-Thatas, theoretical and practical knowledge.
- (3) They will also learn about some primary Ragas and about some primary Talas.

Semester: I

Course Name: Life Sketch of Kazi Nazrul Islam and Theoretical Knowledge of Ragas and Talas of Hindustani Music

Course Code: BAHNZSC102

Course Type: Core (Theoretical)	Course Details: CC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) From this paper students will learn the history of Indian music in the ancient period.
- (2) Students will also learn the knowledge of various musical instruments.

- (3) The learners will also learn about some musical terms, rhythm details and notation system.
- (4) The students will have a complete knowledge of the life of Kazi Nazrul Islam and its influence upon his literary and musical talent.

Semester: II

Course Name: Patriotic Songs of Kazi Nazrul : Foreign Tune and Hindi Songs

Course Code: BAHNZSC201

Course Type: Core (Practical)	Course Details: CC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing different patriotic songs of Nazrul in foreign and Hindi tune

Semester: II

Course Name: Characteristics of Nazrul Patriotic Songs

Course Code: BAHNZSC202

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have a complete theoretical knowledge of the basic characteristics of Nazrul's Patriotic Songs

Semester: III**Course Name: Modern and Seasonal Songs of Nazrul****Course Code: BAHNZSC301**

Course Type: Core (Practical)	Course Details: CC-5			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing various modern and seasonal songs of Nazrul

Semester: III**Course Name: Gazal of Nazrul, Songs based on Drama and Cinema****Course Code: BAHNZSC302**

Course Type: Core (Practical)	Course Details: CC-6			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing Ghazal of Nazrul and different songs based on drama and cinema

Semester: III**Course Name: Theoretical Aspects of Modern, Seasonal Songs and Gazal of Nazrul****Course Code: BAHNZSC303**

Course Type: Core (Theoretical)	Course Details: CC-7			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the knowledge of the theoretical aspects of Modern, Seasonal Songs and Ghazals of Nazrul

Semester: III

Course Name: Knowledge of Harmonium

Course Code: BAHNZSSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 0 - 0 - 8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The student will acquire an elementary knowledge of Harmonium and its various parts.
- (2) They will learn about Harmonium finger techniques.
- (3) They will also learn about sound production from this paper.

Semester: IV

Course Name: Religious Songs of Nazrul

Course Code: BAHNZSC401

Course Type: Core (Practical)	Course Details: CC-8			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing various religious songs of Nazrul Islam

Semester: IV**Course Name: Folk Songs and Kirtan of Nazrul****Course Code: BAHNZSC402**

Course Type: Core (Practical)	Course Details: CC-9			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing various folk and kirtan songs of Nazrul

Course Name: Theoretical Aspects of Modern, Seasonal Songs and Ghazal of Nazrul**Course Code: BAHNZSC403**

Course Type: Core (Theoretical)	Course Details: CC-10			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the knowledge of the theoretical aspects of Modern, Seasonal Songs and Ghazals of Nazrul

Semester: IV**Course Name: Basic Knowledge of Tabla****Course Code: BAHNZSSE401**

Course Type: SE	Course Details: SEC-2			L-T-P: 0 - 2 - 4	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to learn and present a solo performance with the tabla (Tabla Sangat).

Semester: V

Course Name: Songs of Nazrul Based on Drupad, Dhamar, Kheyal, South Indian Ragas and Unconventinoal Ragas

Course Code: BAHNZSC501

Course Type: Core (Practical)	Course Details: CC-11			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing different songs of Nazrul based on Dhrupad, Dhamar, Kheyal

Semester: V

Course Name: Theoritical Aspects of Nazrul Songs Based on Sanskrit Chhanda

Course Code: BAHNZSC502

Course Type: Core (Theoretical)	Course Details: CC-12			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

After the completion of course, the students will have the knowledge of the theoretical aspects of Nazrul songs based on Sanskrit Chhanda

Semester: V

Course Name: Knowledge of Raga

Course Code: BAHNZSDSE501

Course Type: DSE	Course Details: DSEC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have the knowledge of Raga

Semester: V

Course Name: Ability to sing Dhrupad, Kheyals, Bhajans and Thumri

Course Code: BAHNZSDSE502

Course Type: DSE	Course Details: DSEC-2			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to song Dhrupad, Kheyal, Bhajan and Thumri based on different ragas

Semester: VI**Course Name: Songs of Nazrul Based on Thumri, Tappa and Fun Songs****Course Code: BAHNZSC601**

Course Type: Core (Practical)	Course Details: CC-13			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing various songs of Nazrul based on Thumri, Tappa and Comedy

Semester: VI**Course Name: Ragas and Talas - Chandas created by Nazrul****Course Code: BAHNZSC602**

Course Type: Core (Theoretical)	Course Details: CC-14			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have the practical ability and knowledge of various Ragas and Talas created by Nazrul

Semester: VI**Course Name: Stage Performance****Course Code: BAHNZSDSE601**

Course Type: DSE	Course Details: DSEC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing any song of Nazrul Islam

Semester: VI

Course Name: Dissertation related to Kazi Nazrul Islam

Course Code: BAHNZSDSE602

Course Type: DSE	Course Details: DSEC-4			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to prepare a dissertation related to Kazi Nazrul Islam

COURSE LEARNING OUTCOMES IN GENERIC ELECTIVE COURSES

Semester: I

Course Name: Fundamental Knowledge of Hindustani Music - I

Course Code: BAHNZSGE101

Course Type: GE	Course Details: GEC-1			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will gain a basic knowledge like alankar swaramalika, Drut kheyal, Dhrupad and Dhamar.

Semester: II**Course Name: Nazrul's Modern and Seasonal Songs****Course Code: BAHNZSGE201**

Course Type: GE	Course Details: GEC-2			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to sing Modern and Seasonal Songs of Nazrul

Semester: III**Course Name: Advanced Knowledge of Hindustani Music****Course Code: BAHNZSGE301**

Course Type: GE	Course Details: GEC-3			L-T-P: 0 - 0 - 12	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will gain an advanced knowledge of drut kheyal, swaramalika, dhrupad , dhamar and lakshangeet.

Semester: IV**Course Name: Project on Hindustani Music****Course Code: BAHNZSGE401**

Course Type: GE	Course Details: GEC-4		L-T-P: 0 - 0 - 12		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- (1) The students will undertake Field Work related to Hindusthani Music.

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF POLITICAL SCIENCE**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BA Honours in Political Science

Course Learning Outcomes

Semester- I

Course Name: Political Theory-1

Course Code: BAHPLSC101

Course Type: C	Course Details: CC-1			L-T-P: 5-1-0	
Credit: ...6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

1. Students will be able to Learn key concepts and various approaches to understand politics.
2. They will come to know about the nature of various type of states and theories.
3. Students will come to know how liberal tradition look at and understand politics.
- 4.They will learn the concept of state Sovereignty and learn also various theories of sovereignty.

Semester- I

Course Name: Comparative Politics

Course Code: BAHPLSC102

Course Type: C	Course Details: CC-2			L-T-P: 5-1-0	
Credit: ...6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

- 1.Students will be able to Learn key concepts of Comparative politics and Comparative Governments, distinction between them and development of Comparative politics.
- 2.They will come to know the purpose, Scope and methods of comparison and different approaches to the study of Comparative politics.
- 3Students will come to know different theories of Political System.
- 4.They will learn the concept of Political Modernization and Political Development.
- 5.They will come to understand Dependency Theory.

SEMESTER - II**Course Name: Political Theory-II****Course Code: BAHPLSC201**

Course Type: Core (Theoretical)	Course Details: CC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. Comprehend one of the major developments of the nineteenth and twentieth century period, when the Socialist tradition, known to the wider world as Marxism, appeared as one of the prominent alternative discourses opposed to the Liberal school of thought;
2. Assess the importance of the progress of mankind from the historical perspective of class phenomenon and its related notion of economic progression;
3. Grasp the key concepts of Marxism such as dialectic, labour, theory of surplus-value, alienation, revolution, the working class, the idea of party and communism.

SEMESTER - II**Course Name: Comparative Constitutional Systems****Course Code: BAHPLSC202**

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		...	10	...	40

Course Learning Outcomes

1. Understand the importance of comparative analysis required for a proper assessment of the different constitutional systems;
2. Comprehend the various historical, political, social, cultural, economic and diplomatic aspects of UK, USA and PRC;
3. Assess the relation between the political systems of UK, USA and PRC and to understand the importance of their relative position in the world order.

Semester- II
Course Name: Comparative Government and Politics
Course Code: BAHPLSGE201

Course Type: GE	Course Details: GEC-2		L-T-P: 5-1-0		
Credit: 6	Full Marks:	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcome

1. Students will be able to understand the development of Comparative Politics.
2. They will understand scope and purposes of Comparative Politics.
3. Students will gather typologies of Comparative Politics.
4. Students will acquire knowledge on comparative analysis of legislature, executive, and judiciary.

Semester- III
Course Name: Western Political Thought I
Course Code: BAHPLSC301

Course Type: C	Course Details: CC-5		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. The students will know the key ideas of all the political philosophers given in the course.
2. They will be able to explain what was the justice according to Plato
3. They will be able to answer how Aristotle explain the concept of state and constitution.
4. They will be able to answer how and why Machiavelli gave an overriding priority to pragmatism above ethics and values in operation of statecraft.
5. They will be able to answer how Bodin define state.

Semester-III

Course Name: Indian Political Thought

Course Code: BAHPLSC302

Course Type: C	Course Details: CC-6			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. The student will come to know about the ideas of individual sages and philosophers on politics and functioning of government.
2. They will be able to interlink the themes on the functioning of the Monarchy and its relationship with the people taking the cue from the ideas of individual thinkers.
3. Students will be able to explain the trajectory of ideas on key political questions and institutions of ancient India.
4. Students will be able to explain the key ideas of Raja Rammohan Roy.
5. They will come to understand how Bankim Chandra Chattopadhyay,

Semester- III

Course Name: Political Sociology

Course Code: BAHPOLSC303

Course Type: C	Course Details: CC-87			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		00	10	00	40

Course Learning Outcomes

1. Students will be able to understand the difference between Sociology of Politics and Political Sociology.
2. This course will be helpful to understand the concepts of Political Sociology and their applicability.

Semester- III
Course Name: Nationalism in India
Course Code: BAHPLSGE301

Course Type: GE	Course Details: GEC-3		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcomes

1. This course will provide adequate knowledge to the students on Indian nationalism.
2. This course will be helpful to understand the significance of 'two nation theory'.

Course Name: Feminism: Theory and Practice
Course Code: BAHPLSGE302

Course Code: BAPHESGEC03					
Course Type: GE	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcomes

1. This course will be helpful to understand the theories of Feminism.
2. This course will be helpful to understand social reforms movements in India.
3. This course will be able to understand women's rights in India.

Course Name: Democratic Awareness with Legal Literacy
Course Code: BAHPLSSE301

Course Code: BMM-ESSE-01					
Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcomes

1. This course will be helpful to understand the fundamental rights and duties and other constitutional rights of citizens of India.
2. This course will be helpful to understand anti-terrorist laws, dowry system, sexual harassment and violence against women.
3. The students will be able to understand the role of the judiciary in protection of women.

Course Name: Public Opinion and Survey Research
Course Code: BAHPLSSE302

Course Code: BBAH ESSE202					
Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcomes

1. This course will be helpful to understand the effectiveness of public opinion.
2. Students will be able to understand various models of sampling of public opinion.

Semester- IV
Course Name: Western Political Thought-II
Course Code: BAHPOLSC401

Course Type: C	Course Details: CC-8		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. The students will know the ideas of all the political philosophers given in the course.
2. Students will be able to make a distinction among Hobbes, Locke and Rousseau on the stat of nature, law of nature, nature and from of contract and emergence of state from the contract.
3. Students will be able to understand the theory of dialectical and historical materialism of Marx and Engels.
4. Students will be able to understand the meaning of utilitarianism and how Bentham and Mill differ from each other.

Semester- IV
Course Name: Indian Government and Politics
Course Code: BAHPOLSC402

Course Type: C	Course Details: CC-9			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. Students will be able to know the importance of the preamble in the constitutional design of India.
2. Students will be able to know the fundamental rights and duties of the Indian citizens.
3. Students also know about the nature of the Indian federalism and all about the the union state relationship in India.
4. Student will be able to know the legislative process of India.
5. Students also able to answer the questions about the functions and role of the President, Prime Minister, Governor, Chief Minister, Parliament and State legislature.

Semester-IV
Course Name: Basis Theories of International Relations
Course Code: BAHPLSC403

Course Type: C	Course Details: CC-10		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. This course will be helpful to understand the theories to the study of International Relations.
2. The students will be able to understand the basic concepts of International Relations.
3. They will understand the major approaches to the study of International Relations.

Semester- IV

Course Name: Legislative Practices and Procedures

Course Code: BAHPLSSE401

Course Type: SE	Course Details: SEC-1			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. This course will be helpful to learn about legislative procedures and functions of the governments.
2. This course will be helpful to understand about law-making procedure.
3. Students will be able to know about different types of media and their significance for legislators.

Semester- IV

Course Name: Peace and Conflict Resolution

Course Code: BAHPLSSE402

Course Type: SE	Course Details: SEC-2			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes

1. Understand the concept of peace and conflict.
2. Understand relationship between countries.
3. Understand the international rules and regulations to resolve conflict and implement peace among countries.
4. Understand the current status of War and Peace in the world.

Semester- IV
Course Name: - Governance: Issues and Challenges
Course Code: BAHPLSGE401

Course Type: (GE)	Course Details: GE-4			L-T-P: 5 - I - 0	
Credit: 6	Full Marks:50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Historical Evaluation of the concept of Governance
2. Challenges face by the modern day administration regarding Governance
3. Changing Nature of the Democratic Institution
4. Role of International Institution like World bank in bringing Governance Reform

Semester-IV
Course Name: Politics of Globalization
Course Code: BAHPLSGE402

Course Type: (GE)	Course Details: GE-4			L-T-P: 5 - I - 0	
Credit: 6	Full Marks:50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcome

1. The students will be able to understand meaning and debates of globalization.
2. The students will be able understand impact of globalization on economy.
3. They will understand the impact of globalization on international order.

Semester-V

Course Name: World Politics: Organizations and Issues

Course Code: BAHPLSC501

Course Type: C	Course Details: CC-11			L-T-P: 5 - I – 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcomes

1. This course will be helpful to the students to understand the global politics in the Cold War era.
2. The students will be able to understand about the UNO and other international financial organizations.
3. The students will be able to understand the functions and importance of the regional organizations.
4. They will gather in-depth ideas on major international issues.

Semester- V

Course Name: Basic Theories of Public Administration

Course Code: BAHPLSC502

Course Type: C	Course Details: CC-12			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	

Course Learning Outcomes

1. Studying Public administration students will develop the leadership and management skills.
2. Students will be taught how to manage people efficiently
3. We all will inspire other people for productive work.

Semester-V

Course Name: DSE- Human Rights: Theory and Practice

Course Code: BAHPLSDSE501

Course Type: DSE	Course Details: DSEC-1			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The course will equip students with an understanding of debates on human rights through a study of human rights concerns in India.
2. While keeping India as a common case study in all thematic analyses, it will familiarise students with the historical evolution of human rights and the theoretical frameworks and core themes that inform the debates on human rights.
3. The course will enhance the students' understanding of state response to issues and human rights questions pertaining to structural violence, such as terrorism and counter terrorism and rights of adivasis from the human rights perspective.

Semester- V

Course Name: Social Movements in Contemporary India

Course Code: BAHPLSDSE502

Course Type: DSE	Course Details: DSE-2		L-T-P: 5 - I - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcomes

1. To develop an understanding about the concept of social movements-its origin, development and impact on all aspects of human life.
- 2.To critically examine the concept of social change which can be ushered in through the process of combined and collective efforts.
- 3.To theoretically reflect on the significance of social movement by studying the nature of various types of movements including peasants, tribal and environmental movements.

Semester- V
Course Name: -Public Policy in India
Course Code: BAHPLSDSE503

Course Type: (DSE)	Course Details: DSE			L-T-P: 5 - I - 0	
Credit: 6	Full Marks:50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Importance and relevance of Public policy in any political System
2. Policy making and implementation process in India
3. Role of different institution in policy making and Implementation within the Constitutional Framework in India.
4. Evaluation and analysis of different public Policy.

Semester- V
Course Name: India's Foreign Policy in a Globalizing World
Course Code: BAHPLSDSE504

Course Type: DSE	Course Details: DSE-4			L-T-P: 5 - I - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Learning Outcome

1. The students will be able understand the changing dynamics of India's foreign policy in the globalized world.
2. They will gather the major issues of India's foreign policy in the globalized world.
3. This course will be beneficial for the students to assume the relational dynamics between India and the USA and UK.
4. This course will be helpful to understand India's economic engagements with various economic forum.

Semester- V
Course Name: Gender and Politics in India
Course Code: BAHPLSDSE505

Course Type: DSE	Course Details: DSE-4		L-T-P: 5 - I - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcome

1. Students will be able to understand the Gender-based participation in politics by this course.
2. They will be able to understand conceptual differences between women and trans gender.
3. This course will be beneficial for the students to understand Gender identity.

Semester- VI
Course Name: Local Government in West Bengal
Course Code: BAHPLSC601

Course Type: C	Course Details: CC13			L-T-P: 5-1-0	
Credit:6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	

Course Learning Outcomes

1. It involves the citizens in determining specific local public needs.
2. To know about our own area, about the constitution.
3. Women can be aware of their own abilities

SEMESTER VI

Course Name: PROJECT

Course Code: BAHPLSC602

Course Type: C	Course Details: CC14		L-T-P: 0-0-12		
Credit:6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		50	-	50	-

Course Learning Outcomes:

1. Developed skills to design small project.
2. Should develop the habit of teamwork and perform experiments related to the project.
3. Developed basic skills for data retrieval, representation, analysis and interpretation.

Semester-VI

Course Name: Understanding Global Politics

Course Code: BAHPLSC601

Course Type: DSE	Course Details: DSE-3		L-T-P: 5-1-0		
Credit:6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	40	-	40

Course Learning Outcomes

1. This course will help to understand state system in the era of globalization.
2. The students will be able to understand the mechanism of global economy.
3. Students will be able to assess the role of transitional economic actors.
4. They will understand millennium developmental goal.

Semester-VI

Name of the Course: Understanding South Asia

Course Code: BAHPLSDSE602

Course Type: DSE	Course Details: DSE-3			L-T-P: 5 - I - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Learning Outcome

1. This course will be helpful to understand the strategic importance of South Asian region.
2. This course will be beneficial to understand the major border disputes in South Asia.
3. The students will be benefited in exploring the reasons of civil wars and conflicts in South Asian region.
4. They will be able to understand democratic systems of South Asia and regional integration process.

Course Name: Citizenship in a Globalizing World

Course Code: BAHPLSDSE603

Course Type: DSE		Course Details: DSE-3		L-T-P: 5 - I - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcomes

1. This course will be helpful to understand different concepts of citizenship.
2. The students will be able to understand evolution of citizenship
3. The students will understand citizenship through the lance of global justice.

Course Name: Politics in West Bengal**Course Code: BAHPLSDSE604**

Course Type: DSE	Course Details: DSE-4			L-T-P: 5 - I - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcomes

1. This course will help to understand the dynamics of West Bengal Politics.
2. This course will be helpful to understand the role of leadership in West Bengal Politics.
3. This course will be helpful to assess the role of civil society in West Bengal.

Semester- VI**Course Name: Environmental Politics****Course Code: BAHPLSDSE605**

Course Type: DSE	Course Details: DSE-4			L-T-P: 5 - I - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		–	10	–	40

Course Learning Outcome

1. To develop a deeper understanding about the concept of environment, its living and non-living components and the philosophy of environmentalism.
2. To develop an awareness about the various environmental challenges/issues faced by the entire world which involves both developing and developed countries.
3. To critically evaluate the current paradigm of development based on rapid industrialization and to shift the focus on alternative paths to development especially the concept of sustainable development.
4. To analyze the role of public policy at the national and international level with regards to the protection and management of environmental issues along with an emphasis on collective efforts locally, nationally and globally.

B.A. Programme in Political Science

Course Learning Outcomes

Semester- I

Course Name: Introduction to Political Theory

Course Code: BAPPLSC101

Course Type: C	Course Details: CC-1(1)		L-T-P: 5 - 1 – 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1 The objective of this course is to understand the fundamental alternative political theories that have shaped our world, and to consider which political theories may shape our world in the future.

2 Since the state occupies a central position in the discourses on politics, the understanding of different theories on the state will allow the students to understand the role of the state in the society and how it governs and regulate the power structure.

3 Ultimately student will learn about the basic concepts and theories of Political Science.

Semester- II

Course Name: Comparative Government and Politics

Course Code: BAPPLSC201

Course Type: C	Course Details: CC-1(2)		L-T-P: 5 - 1 – 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The goal of this course is to provide useful knowledge about the comparative theories, processes, policies and constitutions of various countries in a comparative context.

2. This course exposes the students to concepts and approaches which can apply to understand different political regimes in terms of the origin of governmental structures and their functioning.

Semester- III

Course Name: Indian Polity and Constitution

Course Code: BAPPLSC301

Course Type: C	Course Details: CC-1(3)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

- 1 Students will learn about the basic frame work of Indian Constitution.
- 2 Students will be able to describe and think critically about the institutional features of Indian politics.
- 3 Students will learn about Indian Constitution with a focus on the role of the Constituent Assembly and examining the essence of the Preamble.
- 4 Students will Critically analyze the important institutions of the Indian Union: the Executive: President; Prime Minister, Council of Ministers; Governor, Chief Minister and Council of Ministers; The legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature, The Judiciary: Supreme Court and the High Court's: composition and functions-Judicial Activism.

Semester- III**Course Name: Legislative Support****Course Code: BAPPLSSE301**

Course Type: SE	Course Details: SEC-1			L-T-P: 4 - 0 – 0	
Credit: 4	Full Marks:	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Students will know about the powers and functions of members of parliament, state legislative assemblies and urban and rural governing bodies.
2. Students will also learn about the rule making process in Indian parliament, budget processes and different types of legislative committees.

Semester- IV**Course Name: Introduction to International Relations****Course Code: BAPPLSC401**

Course Type: C	Course Details: CC-1(4)			L-T-P: 5 - 1 – 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. This course will be helpful to understand the basic foundations of International Relations.
2. The theoretical understanding of International Relations will be clear by this course.
3. The students will be able to understand the basic tools foreign policy.

Semester- IV**Course Name: Public Opinion and Survey Research****Course Code: BAPPLSSE401**

Course Type: SE	Course Details: SEC-2			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The students will be able to understand the concept of public opinion.
2. The students will be able to understand interviewing, and questionnaire.

Semester- V**Course Name: Themes in Comparative Political Thought****Course Code: BAPPLSDSE501**

Course Type: DSE	Course Details: DSEC-1(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Students will get aware from different major western political thoughts. By this course student will understand the political enquiry of Aristotle, Locke, Rousseau and J.S. Mill.
2. Further, students will also get aware from different major Indian political thoughts. By this course student will understand the views of Kautilya, Tilak, BR Ambedkar, Nehru and Jayprakash Narayan.

Semester- V

Course Name: Administration and Public Policy: Concepts and Theories

Course Code: BAPPLSDSE502

Course Type: DSE	Course Details: DSEC-1(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Students will understand and demonstrate the basic understanding of theories, concepts and practices relevant to administrative theory.
2. Students will acquire critical thinking about the theories propounded by classical, scientific management and Behavioural thinkers.
3. Objective of this course is to make students aware about bureaucracy, development administration and decision making process of Herbert Simon.
4. Objective of this course is to make students aware about the concept of public policy and its relevance in public administration.

Semester- V

Course Name: Reading Gandhi

Course Code: BAPPLSGE501

Course Type: GE	Course Details: GEC-1			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Objective of this course is to make students aware about the political, social and moral ideas of MK Gandhi.
2. Students will learn the commentaries on Hind Swaraj and Gandhian thought.

3. Objective of this course is to make students aware about the relevance of Gandhian thought in modern times.

Semester- V

Course Name: Gender Politics

Course Code: BAPPLSGE502

Course Type: GE	Course Details: GEC-1		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. Student will able to differentiate between gender and sex.
2. Student will also learn how patriarchy operates as a power structure in our society.
3. This course offers knowledge about effective participations of women in decision-making structure and security concern for women.

Semester- V

Course Name: Democratic Awareness

Course Code: BAPPLSSE501

Course Type: SE	Course Details: SEC-3		L-T-P: 4 - 0 - 0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

- 1 Student will learn about fundamental rights, fundamental duties and other constitutional rights.
- 2 This course brings the forefront of violence against women and legal provisions to tackle with them.
- 3 This course offers information about anti-terrorist laws.

4 This course offers about criminal procedure in India.

Semester- V

Course Name: Globalization: Theories and Concepts

Course Code: BAPPLSSE502

Course Type: SE	Course Details: SEC-3			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. This course will underline the evolution of the state system and the concept of sovereignty, global economy, and transnational economic actors.
2. Objective of this course is to make students aware about what are the repercussions of global economic integration on socio-cultural change at local level.

Semester- VI

Course Name: Democracy and Governance

Course Code: BAPPLSDSE601

Course Type: DSE	Course Details: DSEC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

- 1 This course offers basic understanding of process of globalization.
- 2 This course offers understanding of evolution of the state system since treaty of Westphalia.
- 3 To demonstrate that globalization has had diverse impacts on societies and places.
- 4 To study the intuitions of global economy

Semester- VI**Course Name: Politics in South Asia****Course Code: BAPPLSDSE602**

Course Type: DSE	Course Details: DSEC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical

Course Learning Outcomes

- 1 Students will learn about geo-political realities and historical background of South Asia.
- 2 Students will learn about constitutional and political development since Second World War.
- 3 The objective of this course is to provide better understanding of post-colonial states in South Asia.

Semester- VI**Course Name: Human Rights: Theories and Concepts****Course Code: BAPPLSGE601**

Course Type: GE	Course Details: GEC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The student will be able to explain the meaning of human rights and examine human rights issues in different social, political and cultural contexts.
2. The Students will be able to examine and explain issues of human rights when state and its agencies apply the methods and techniques of surveillance, interrogation and counter-terrorism operations.
3. Students will know about human rights movements in India.

Semester- VI**Course Name: Global Politics****Course Code: BAPPLSGE602**

Course Type: GE	Course Details: GEC-2		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. This course offers basic understanding of process of globalization.
2. This course offers the impact of globalization on Indian economy since 1990.
3. This course offers how globalization has changed the new international order in post-cold war era.
4. To demonstrate that globalization has had diverse impacts on societies and places.

Semester- VI**Course Name: Conflict and Peace Building****Course Code: BAPPLSSE601**

Course Type: SE	Course Details: SEC-4			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. This course emphasizes on the study of conflict at local, sub-national and international level.
2. Student will learn to pursue ways to reduce violent conflict and promote justice by means of negotiations and non-violent action.
3. Students are expected to become theoretically adept and analytically sophisticated on the issues of conflict and peace building.

Semester- VI**Course Name: Environment Politics****Course Code: BAPPLSSE602**

Course Type: SE	Course Details: SEC-4			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The purpose of this course is to provide awareness regarding environmental issues that is political in nature like Chipko, Narmada Bachao Andolan.
2. Students will also know about issues of climate change and green governance.
3. Students may critically analyze the policies framed in this regard

Semester- VI**Course Name: Democracy and Governance****Course Code: BAPPLSDSE601**

Course Type: DSE	Course Details: DSEC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes

1. The objective of this course is to understand the meaning of good governance and how it evolves over the years.
2. Students will learn about different forms of Governance i.e. E-governance, Democratic Governance, Corporate Governance and Environmental Governance.

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF SANSKRIT

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BA HONOURS IN SANSKRIT
COURSE LEARNING OUTCOMES

SEMESTER- I

Course Name: Classical Sanskrit Literature (Poetry)

Course Code: BAHSNSC101

Course Type: Core (Theoretical)	Course Details: CC-1			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire the language skills.
- To be aware of the environmental aspects.
- To enrich their mental state and develop their personality.
- To enrich their mental state and develop their personality.
- To enrich themselves with the wisdom of Sanskrit Poetry
- To have at least a general sense of the various dimensions of Classical Sanskrit Literature especially poetry like Bhaṭṭikāvyaṃ: Canto- II & Raghuvamśam: Canto- XIII.

Course Name: Classical Sanskrit Literature (Poetry & Metrics)

Course Code: BAHSNSC102

Course Type: Core (Theoretical)	Course Details: CC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of Sanskrit Literature (Poetry) Like Kirātārjunīyam: Canto-I.
- To acquire the knowledge on Sanskrit Language especially on Sanskrit Meters like Indravajrā, Upendravajrā, Upajāti, Rathoddhatā, Śālinī, Vaṃśasthaviḷam, Drutaviḷamvitam, Totakam, Praharṣiṇī, Rucirā, Vasantatilakam, Mālinī, Mandākrāntā, Śikhariṇī, Hariṇī, Śārdūlavikrīḍitam, Sragdharā, Anuṣṭup.
- To enrich them with the sense of metrics.

Course Name: Basic Sanskrit and Metrics

Course Code: BAHSNSGE101

Course Type: GE (Theoretical)	Course Details: GEC-1			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study
- To acquire knowledge on Basic Sanskrit Grammar.
- To enrich them with the sense of metrics.

SEMESTER- II

Course Name: Classical Sanskrit Literature (Drama)

Course Code: BAHSNSC201

Course Type: Core (Theoretical)	Course Details: CC-3			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To enrich their mental state and develop their personality.
- To enrich themselves with the wisdom of Sanskrit Drama.
- To have a general sense of the various dimensions of Sanskrit Literature like Abhijñānaśakuntalam.
- To have at least a general sense of the various dimensions of Sanskrit Drama.
- To take part in social transformation.

Course Name: Classical Sanskrit Literature (Prose)

Course Code: BAHSNSC202

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of Sanskrit Literature (Prose) like Śukanāsopadeśa-Kādambarī & Daśakumārcaritam (Rājvāhanacaritam).
- To inculcate in them the moral values.

- To take part in social transformation.

Course Name: Sanskrit Prose & Poetry

Course Code: BAHSNSGE201

Course Type: GE (Theoretical)	Course Details: GEC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own Discipline of study.
- To have at least a general & basic sense of the various dimensions of Sanskrit literature in connection with Aśvaghoṣa, Bhāsa, Kālidasa, Bhāravi, Māgha, Bhaṭṭi, Śrīharṣa, Subandhu, Daṇḍin, Bāṇabhaṭṭa, Śūdraka, Viśākhadatta, Bhavabhūti, Bhaṭṭanārāyaṇa, Pañcatantra, Hitopadeśa, Vetālapañcaviṃśati, Siṃhāsanadvātrimśikhā, Puruṣaparīkṣā.

SEMESTER- III

Course Name: Sanskrit Grammar (Kāraka)

Course Code: BAHSNSC301

Course Type: Core (Theoretical)	Course Details: CC-5			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Grammar especially on Kāraka.
- To acquire knowledge on Sanskrit Language in general.
- To grasp the sutras of Kāraka for using in writing..

Course Name: Critical Survey of Sanskrit Literature

Course Code: BAHSNSC302

Course Type: Core (Theoretical)	Course Details: CC-6			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature.
- To acquire knowledge on the History of Sanskrit Literature (Drama): Bhāsa, Kālidasa, Śūdraka, Viśākhadatta, Śrīharṣa, Bhavabhūti, Bhaṭṭanārāyaṇa.
- To have at least a general & basic sense of the various dimensions of Sanskrit literature in connection with Vaidika Sāhityam, Rāmāyaṇam, Mahābhāratam, Purāṇam.
- To have knowledge on the History of Sanskrit Literature (Mahākāvya) with spl. Reference to Aśvaghoṣa, Kālidasa, Bhāravi, Māgha, Bhaṭṭi, Śrīharṣa.
- To know more about the History of Sanskrit Literature (Fables) like Pañcatantra, Hitopadeśa, Vetālapañcaviṃśati, Siṃhāsanadvātriṃśikā, Puruṣaparīkṣā. Pañcatantra, Hitopadeśa.
- To possess knowledge on the History of Sanskrit Literature (Prose) with spl. Reference to Subandhu, Daṇḍin, Bāṇabhaṭṭa.

Course Name: Self-Management in the Gītā

Course Code: BAHSNSC303

Course Type: Core (Theoretical)	Course Details: CC-7			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of Sanskrit Literature like Srimadvagvadgita (Chapter –III).
- To help them managing their own self
- To inculcate in them the social & moral aspects of the discourses of Gita.
- To mastering them with the ability to improve independent working.
- To take part in social transformation.
- To understand the utility of preservice of social environment.

Course Name: Sanskrit Drama /	
Ancient Indian Polity / Indian Epigraphy & Paleography	
Course Code: BAHSNSGE301 / BAHSNSGE302 /	
BAHSNSGE303 {Any one}	

Course Name: Sanskrit Drama

Course Code: BAHSNSGE301

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own Discipline of study.
- To have at least a general sense of the various dimensions of Sanskrit Literature (Drama) like Abhijñānaśakuntalam.
- To take part in social transformation.
- To understand the utility of preservice of environment.

Course Name: Ancient Indian Polity

Course Code: BAHSNSGE302

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To have at least a general sense of the various dimensions of Sanskrit literature.

Course Name: Indian Epigraphy & Paleography

Course Code: BAHSNSGE303

Course Type: GE (Theoretical)	Course Details: GEC-3			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To enrich their knowledge about Indian History.
- To have at least a general sense of the various dimensions of Indian Epigraphy & Paleography.

Course Name: Communicative Sanskrit / Sanskrit Grammar

Course Code: BAHSNSSE301 / BAHSNSSE302 {Any one}

Course Name: Communicative Sanskrit

Course Code: BAHSNSSE301

Course Type: SE (Practical)	Course Details: SEC-1			L-T-P: 0 – 0 - 8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	....	20	....

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire communication skills in understanding Sanskrit with LSRW (Listening, Speaking, Reading & Writing) capacities.
- To acquire knowledge on Sanskrit Language.

Course Name: Sanskrit Grammar (General)

Course Code: BAHSNSSE302

Course Type: SE (Theoretical)	Course Details: SEC-1			L-T-P: 4 – 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Grammar (General).
- To have knowledge on Sanskrit Language with special reference to Strīpratyaya, Atmanepada & Parasmaipadavidhānam, Namadhātu, San , Yañ, Use of Comparative, Superlative & Matvarthīya Taddhita Pratayas & The Concept of Following Saṃjñās: Pada, Vibhakti, Sūtra, Vārtika, Bhāṣya, Vibhāṣā, Upasarga, Gati, Nipāta, Guṇa, Vṛiddhi, Samprasāraṇam, Avyaya, Niṣṭhā, Anuvṛtti, Ti, Ghi, Ghu, Nadī & Upadhā.

SEMESTER- IV

Course Name: Sanskrit Grammar (Samāsa)

Course Code: BAHSNSC401

Course Type: Core (Theoretical)	Course Details: CC-8		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Grammar in general.
- To grasp the sutras of Kāraka for using in writing..
- To grasp the sutras of Samāsa for using in writing..
- To have knowledge on Sanskrit Language especially on Samāsa.

Course Name: Indian Epigraphy, Palaeography and Chronology

Course Code: BAHSNSC402

Course Type: Core (Theoretical)	Course Details: CC-9			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Brāhmī Script, Epigraphy, Śilālekha.
- To enrich their knowledge about Indian History.
- To have at least a general sense of the various dimensions of Indian Epigraphy, Paleography and Chronology.

Course Name: Vedic Literature

Course Code: BAHSNSC403

Course Type: Core (Theoretical)	Course Details: CC-10		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquaint themselves with Vedic Hymns.
- To enrich their knowledge with Vedic Grammar like Sandhi, Declension of
- To have at least a general sense of the various dimensions of Sanskrit Literature like Vedic Literature (R̥gvedasaṃhitā).
- To have knowledge on Vedic Hymns with Sāyaṇa's Bhasya

(Agnisūktam-2.6, Indrasūktam-2.12, Hiranyagarbhasūktam- 10.121,

a- stems, Position of Vedic Subjunctive, Vedic Infinitive, The Vedic accent & Pada-pāṭha.

Akṣasūktam-10.34, Devīsūktam-10.125).

**Course Name: Sanskrit Grammar / Linguistics /
Basic Concept on Upaniṣadic Literature {Any one}
Course Code: BAHSNSGE401 / BAHSNSGE402 /
BAHSNSGE403 {Any one}**

**Course Name: Sanskrit Grammar
Course Code: BAHSNSGE401**

Course Type: GE (Theoretical)	Course Details: GEC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To gather knowledge on Sanskrit Grammar.
- To obtain knowledge on Sanskrit Language with special reference to Strīpratyaya, Atmanepada & Parasmaipadavidhānam, Namadhātu, San , Yañ, Use of Comparative, Superlative & Matvarthīya Taddhita Pratayas & The Concept of Following Saṃjñās: Pada, Vibhakti, Sūtra, Vārtika, Bhāṣya, Vibhāṣā, Upasarga, Gati, Nipāta, Guṇa, Vṛiddhi, Samprasāraṇam, Avyaya, Niṣṭhā, Anuvṛtti, Ti, Ghi, Ghu, Nadī & Upadhā.

Course Name: Linguistics
Course Code: BAHSNSGE402

Course Type: GE (Theoretical)	Course Details: GEC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquaint themselves with Sanskrit Linguistics especially on Primitive Indo-European, Divisions of Indo-European, Indo- Irāṇīyan (Āryān), Emergence of Indo-Āryān, Non-Āryān, Influence of Sanskrit Vedic & Classical Sanskrit.
- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To have knowledge on some Phonetic Laws & Tendencies, Grīmm's Law, Verner's Law, Grassmann's Law, Collitz's Law, Assimilation, Dissimilation, Metathesis, Prothesis, Epenthesis, Anaptyxis & Haplology.
- To know the rules of language for using the same while listening, Speaking, Reading & Writing.

Course Name: Basic Concept on Upaniṣadic Literature
Course Code: BAHSNSGE403

Course Type: GE (Theoretical)	Course Details: GEC-4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire basic knowledge on Sanskrit Language and Literature other than their own discipline of study.

- To apply the ancient Indian wisdom in contemporary problem solving situations.
- To enrich their power of self realization.
- To know about General Concept on Upaniṣadic Literature.
- To uplift their moral status following the discourses of Upanishads.

<p>Course Name: Ethical and Moral Issues in Sanskrit / Political thought in Sanskrit Literature {Any one} Course Code: BAHSNSSE401 / BAHSNSSE402 {Any one}</p>

Course Name: Ethical and Moral Issues in Sanskrit

Course Code: BAHSNSSE401

Course Type: SE (Theoretical)	Course Details: SEC-2			L-T-P: 4 – 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire practical knowledge on ethical and moral issues in Sanskrit.
- To develop a strong sense of Ethical and Moral Values in their self.
- To develop Personality for becoming responsible academic professionals.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Pañcatantra and Prastāvana-Hitopadeśa (Verses:1-47).
- To possess the human values like truth, righteousness, honesty, sincerity and so on with which the Sanskrit Literature is steeped with.
- To take part in social transformation.

Course Name: Political thought in Sanskrit Literature

Course Code: BAHSNSSE402

Course Type: SE (Theoretical)	Course Details: SEC-2			L-T-P: 4 – 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire practical knowledge on ethical and moral issues in Sanskrit.
- To develop a strong sense of Ethical and Moral Values in their self.
- To develop personality for becoming responsible academic professionals as well as responsible citizen of the nation.
- To gather knowledge on Sanskrit Language and Literature of the than their own discipline of study..
- To have at least a general sense of the various dimensions of Sanskrit Literature like Manusamhitā: Chapter VII.
- To know the rules and regulation as established by Manu for the betterment of the society.
- To obtain knowledge on Political thought in Sanskrit Literature.
- To possess the human values like truth, righteousness, honesty, sincerity and so on with which the Sanskrit Literature is steeped with.
- To take part in social transformation.

SEMESTER- V

Course Name: Poetics and Literary Criticism

Course Code: BAHSNSC501

Course Type: Core (Theoretical)	Course Details: CC-11			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire the knowledge on Poetics and Literary Criticism in Sanskrit.
- To equip themselves with the knowledge of Alankāra like Śleṣa, Upamā, Rūpakam, Utprekṣā, Pariṇāma, Bhrāntimān, Apahnuti, Atiśyokti, Tulyayogitā, Dipakam, Prativastūpama, Driṣṭānta, Nidarśanā, Vyātireka, Samāsokti, Aprastūtapraśamsā & Arthāntaranyāsa.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Kāvya prakāśa (Ullās I & II) by Mammaṭa and Sāhityadarpaṇa (Chapter-X) by Viśvanātha.

Course Name: Indian Ontology and Epistemology

Course Code: BAHSNSC502

Course Type: Core (Theoretical)	Course Details: CC-12			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge about Indian Ontology and Epistemology.

- To have at least a general sense of the various dimensions of Sanskrit Philosophy from *Tarkasaṃgraha* by Annambhaṭṭa.

<p>Course Name: Sanskrit Linguistics / Theatre & Dramaturgy / Art of Balanced Living {Any two} Course Code: BAHSNSDSE501 / BAHSNSDSE502 / BAHSNSDSE503 {Any two}</p>

Course Name: Sanskrit Linguistics

Course Code: BAHSNSDSE501

Course Type: DSE (Theoretical)	Course Details: DSE-1 & 2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquaint themselves with Sanskrit Linguistics especially on Primitive Indo-European, Divisions of Indo-European, Indo- Irāṇīyan (Āryān), Emergence of Indo-Āryān, Non-Āryān, Influence of Sanskrit Vedic & Classical Sanskrit.
- To have knowledge on some Phonetic Laws & Tendencies, Grīmm's Law, Verner's Law, Grassmann's Law, Collitz's Law, Assimilation, Dissimilation, Metathesis, Prothesis, Epenthesis, Anaptyxis & Haplology.
- To know the rules of language for using the same while listening, Speaking, Reading & Writing.

Course Name: Theatre & Dramaturgy**Course Code: BAHSNSDSE502**

Course Type: DSE (Theoretical)	Course Details: DSE-1 & 2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:*After the completion of course, the learners will be able:*

- To acquire knowledge on Indian Theatre & Dramaturgy.
- To enrich themselves with the knowledge of Sanskrit language.
- To have at least a general sense of the various dimensions of Sanskrit literature and language.
- To have knowledge on Sāhityadarpaṇa (Chapter- VI) by Viśvanāth: Rūpakam, Nāndī, Vṛttis (Without, Aṃgas), Prastāvanā, Arthaprakṛti, Arthopakṣepakam, Patākāsthānam,, Kāryam, Avasthā, Sandhi (without Aṃgas) & Nāṭikā.

Course Name: Art of Balanced Living**Course Code: BAHSNSDSE503**

Course Type: DSE (Theoretical)	Course Details: DSE-1 & 2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:*After the completion of course, the learners will be able:*

- To have knowledge on Art of Balanced Living.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Yogasūtram by Patañjali.
- To acquaint themselves with the knowledge on efficacy of Yoga in their lives.

SEMESTER- VI

Course Name: Indian Social Institutions and Polity

Course Code: BAHSNSC601

Course Type: Core (Theoretical)	Course Details: CC-13		L-T-P: 5 - 1 - 0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Indian Social Institutions and Polity.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Arthaśāstram by Koutilya.
- To get themselves acquainted with Dūtapraṇidhi, Amātyotpatti, Mantrādhikār, Śāsanādhikār.
- To know about the directive as established by Kautilya for good governance.

Course Name: Modern Sanskrit Literature

Course Code: BAHSNSC602

Course Type: Core (Theoretical)	Course Details: CC-14			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To gather knowledge on Modern Sanskrit Literature.
- To have at least a general sense of the various dimensions of Sanskrit literature and language.

- To have knowledge on the contents of Śivarājaviṣayam (Nīśvāsa-I) by Ambika Datta Vyāsa.

<p align="center">Course Name: Sanskrit and World Literature / Fundamentals of Āyurveda / Environmental Awareness in Sanskrit Literature / General Concept on Upaniṣadic Literature Course Code: BAHSNSDSE601 / BAHSNSDSE602 / BAHSNSDSE603 / BAHSNSDSE604 {Any two}</p>

Course Name: Sanskrit and World Literature

Course Code: BAHSNSDSE601

Course Type: DSE (Theoretical)	Course Details: DSE 3 & 4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on the Sanskrit Studies in West & East.
- To enable the learners to acquire good leadership skills from the eminent personalities of eastern and western --- home and abroad.
- To take part in social transformation.

Course Name: Fundamentals of Āyurveda

Course Code: BAHSNSDSE602

Course Type: DSE (Theoretical)	Course Details: DSE 3 & 4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquaint themselves with the knowledge of ancient health care System for global care.
- To acquire knowledge on the introduction of Āyurveda, Carakasaṃhitā, Suśrutasamhitā, Aṣṭāṅgasamgraha, Aṣṭāṅghṛdaya, Rasaratnasamuccaya.
- To know the Fundamentals of Āyurveda, ancient medicare system of India.
- To take part in social transformation.

Course Name: Environmental Awareness in Sanskrit Literature Course Code:

BAHSNSDSE603

Course Type: DSE (Theoretical)	Course Details: DSE 3 & 4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of environmental awareness as stated in Sanskrit Literature.
- To know about environmental awareness as reflected in Kālidāsa's Literature.
- To understand the relevance & utility of preservice of environment.

Course Name: General Concept on Upaniṣadic Literature

Course Code: BAHSNSDSE604

Course Type: DSE (Theoretical)	Course Details: DSE 3 & 4			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To apply the ancient Indian wisdom in contemporary problem solving situations.
- To develop Personality for becoming responsible academic professionals and good citizen of the nation.
- To enrich their power of self realization.
- To enrich themselves with the wisdom of Upaniṣads.
- To have at least a general sense of the various dimensions of Sanskrit Literature.
- To know about General Concept on Upaniṣadic Literature.
- To uplift their moral status following the discourses of Upanishads.

BA PROGRAM IN SANSKRIT
COURSE LEARNING OUTCOMES

SEMESTER- I

Course Name: Sanskrit Poetry

Course Code: BAPNSC101

Course Type: Core (Theoretical)	Course Details: CC-1(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To be aware of the environmental aspects.
- To acquire the language skills.
- To enrich their mental state and develop their personality.
- To enrich themselves with the wisdom of Sanskrit Poetry
- To enrich their mental state and develop their personality.
- To have at least a general sense of the various dimensions of Classical

Sanskrit Literature especially poetry like Bhaṭṭikāvyaṃ: Canto-II & Raghuvaṃśaṃ:

Canto-XIII.

SEMESTER- II

Course Name: Sanskrit Prose

Course Code: BAPNSNC201

Course Type: Core (Theoretical)	Course Details: CC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of Sanskrit Literature (Prose) like Daśakumārcaritam (Rājvāhanacaritam)..
- To inculcate in them the moral values.
- To take part in social transformation.
- To enrich their mental state and develop their personality.
- To enrich themselves with the wisdom of Sanskrit Prose..

SEMESTER- III

Course Name: Sanskrit Drama

Course Code: BAPNSNC301

Course Type: Core (Theoretical)	Course Details: CC-1(3)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have a general sense of the various dimensions of Sanskrit

Literature like Abhijñānaśakuntalam.

- To enrich their mental state and develop their personality.
- To enrich themselves with the wisdom of Sanskrit Drama.
- To have a general sense of the various dimensions of Sanskrit

Drama like Abhijñānaśakuntalam.

- To take part in social transformation.

Course Name: Communication in Sanskrit

Course Code: BAPSNSSE301

Course Type: SE (Practical)	Course Details: SEC-1			L-T-P: 0 - 0 - 8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	....	20	....

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language.
- To acquire communication skills in understanding Sanskrit with LSRW (Listening, Speaking, Reading & Writing) capacities.

SEMESTER- IV

Course Name: Sanskrit Grammar (General)

Course Code: BAPSNSC401

Course Type: Core (Theoretical)	Course Details: CC-1(4)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Grammar (General).
- To get themselves acquainted with the Concept of Following Saṃjñās: Pada, Vibhakti, Sūtra, Vārtika, Bhāṣya, Vibhāṣā, Upasarga, Gati, Nipāta, Guṇa, Vṛiddhi, Samprasāraṇam, Avyaya, Niṣṭhā, Anuvṛtti, Ti, Ghi, Ghu, Nadī & Upadhā.
- To have the knowledge on Sanskrit Language with special reference to Strīpratyaya, Atmanepada & Parasmaipadavidhānam, Namadhātu, San , Yañ, Use of Comparative, Superlative & Matvarthīya Taddhita Pratayas.

Course Name: Indian Theatre & Dramaturgy**Course Code: BAPSNSSE401**

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4 – 0 - 0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Indian Theatre & Dramaturgy.
- To enrich themselves with the knowledge of Sanskrit language.
- To have at least a general sense of the various dimensions of Sanskrit literature and language.
- To have knowledge on Sāhityadarpaṇa (Chapter- VI) by Viśvanāth: Rūpakam, Nāndī, Vṛttis (Without, Aṃgas), Prastāvanā, Arthaprakṛti, Arthopakṣepakam, Patākāsthānam,, Kāryam, Avasthā, Sandhi (without Aṃgas) & Nāṭikā.

Course Name: Philosophy, Religion and Culture in Sanskrit Tradition / Literary

Criticism {Any one}

Course Code: BAPSNSDSE501 / BAPSNSDSE502 {Any one}

SEMESTER-V

Course Name: Philosophy, Religion and Culture in Sanskrit Tradition

Course Code: BAPSNSDSE501

Course Type: DSE (Theoretical)	Course Details: DSEC-1(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on the outline of Indian Philosophy.
- To enrich their mental state and develop their personality.
- To have a general sense of the various dimensions of Sanskrit tradition,
- To know more about Philosophy, Religion and Culture in Sanskrit Tradition.

Course Name: Literary Criticism (Alankāra)

Course Code: BAPSNSDSE502

Course Type: DSE (Theoretical)	Course Details: DSEC-1(1)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire the knowledge on Literary Criticism (Alankāra) in Sanskrit.
- To equip themselves with the knowledge of Śleṣa, Upamā, Rūpakam, Utpreksā, Pariṇāma, Bhrāntimān, Apahnuti, Atiśyokti, Tulyayogitā, Dipakam,

Prativastūpama, Driṣṭānta, Nidarśanā, Vyāṭireka, Samāsokti,

Aprastūtapraśamsā & Arthāntaranyāsa.

- To have at least a general sense of the various dimensions of Sanskrit

Literature like Sāhityadarpaṇa (Chapter-X) by Viśvanātha.

Course Name: Political Thought in Sanskrit

Course Code: BAPSNSGE501

Course Type: GE (Theoretical)	Course Details: GEC-1			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study..
- To develop a strong sense of Ethical and Moral Values in their self.
- To develop Personality for becoming responsible academic professionals as well as responsible citizen of the nation.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Manusmṛhitā: Chapter VII.
- To know the rules and regulation of Manu for the betterment of the society.
- To obtain practical knowledge on ethical and moral issues in Sanskrit.
- To obtain the knowledge on Political thought in Sanskrit Literature.
- To possess the human values like truth, righteousness, honesty, sincerity and so on with which the Sanskrit Literature is steeped with.

- To take part in social transformation.

Course Name: Vedic Literature

Course Code: BAPSNSSE501

Course Type: SE (Theoretical)	Course Details: SEC-3		L-T-P: 4 – 0 - 0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To have at least a general sense of the various dimensions of Sanskrit Literature like Vedic Literature (Ṛgvedasaṃhitā).
- To acquaint themselves with Vedic Hymns.
- To enrich their knowledge with Vedic Grammar.
- To have knowledge on Vedic Hymns with Sāyaṇa's Bhasya (Agnisūktam-2.6, (Akṣasūktam-10.34, Saṃjñānasūktam-10.191, Vṛṣṭisūktam-5.83).

SEMESTER- VI

Course Name: Epigraphy

Course Code: BAPSNSDSE601

Course Type: DSE (Theoretical)	Course Details: DSEC-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To have at least a general sense of the various dimensions of Sanskrit literature.

- To have knowledge on Epigraphy.

Course Name: Ethical Issues in Sanskrit Literature

(Nītiśatakam)

Course Code: BAPSNSDSE602

Course Type: DSE (Theoretical)	Course Details: DSE-1(2)			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To have at least a general sense of the various dimensions of Sanskrit Literature like Nītiśatakam by Bhartṛhari

Course Name: Moral Issues in Sanskrit Literature

Course Code: BAPSNSGE601

Course Type: GE (Theoretical)	Course Details: GEC-2			L-T-P: 5 - 1 - 0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on Sanskrit Language and Literature other than their own discipline of study.
- To develop a strong sense of Ethical and Moral Values.
- To possess the human values like truth, righteousness, honesty, sincerity

and so on with which the Sanskrit Literature is steeped.

- To have knowledge on moral issues in Sanskrit Literature.
- To take part in social transformation.
- To develop Personality for becoming responsible academic professionals as well as responsible citizen of the nation.

Course Name: Basic Elements of Āyurveda

Course Code: BAPSNSSE601

Course Type: SEC (Theoretical)	Course Details: SEC-4			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		....	10	....	40

Course Learning Outcomes:

After the completion of course, the learners will be able:

- To acquire knowledge on the introduction of Āyurveda, Carakasaṃhitā, Suśrutasamhitā, Aṣṭāṅgasamgraha, Aṣṭāṅgahṛdaya, Rasaratnasamuccaya.
- To know the basic elements of Āyurveda, ancient medicare system of India.
- To take part in social transformation.

SUMMARY OF LEARNING OUTCOMES

After the completion of course, the learners will be able to:

- ❖ **Acquire communication skills in understanding Sanskrit with LSRW (Listening, Speaking, Reading & Writing) capacities.**
- ❖ **Assist the learners in evolving strategies to address issues in traditional Indian educational paradigms.**
- ❖ **Disseminate the utilities of indigenous Indian perspectives with regard to imparting of education.**
- ❖ **Engage the learners in developing insights about the evolution of the learner's personality into a well-rounded and complete one.**
- ❖ **Enhance the capacity to appreciate the need to have alternative perspectives in Sanskrit.**
- ❖ **Enhance the capacity to validate the process of knowledge acquisition and dissemination and get rid of the errors.**
- ❖ **Possess the human values like truth, righteousness, honesty, sincerity and so on with which the Sanskrit Literature is steeped.**
- ❖ **Understand and explain the contemporary relevance and utility of the Indian knowledge systems.**

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF SOCIOLOGY**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

B.A Program in Sociology
Course Learning Outcomes

Semester- 1

Course Name: Introductory Sociology I

Course Code: BAPSOCC101

Course Type: Core(Theoretical)	Course Details: CC-1(1)			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The students learn to apply the sociological perspective in understanding how society shapes our individual lives.
2. It also provides a foundation for the other more detailed and specialized courses in sociology.

Semester: II

Course Name: Introductory Sociology-II

Course code: BAPSOCC201

Course Type: Core(Theoretical)	Course Details: CC-1(2)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The course lays the foundation of viewing images and ideas of India through a sociological lens. It further investigates sociological concepts and institutions in the Indian context.
2. Through informed interrogation of images, ideas, concepts and institutions of India, the course contributes to the development of critical and analytical thinking.

Semester: III

Course Name: SOCIETY IN INDIA

Course Code: BAPSOCC301

Course Core(Theoretical)	Type:	Course Details: CC-1(3)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The course lays the foundation of viewing images and ideas of India through a sociological lens. It further investigates sociological concepts and institutions in the Indian context.
2. Through informed interrogation of images, ideas, concepts and institutions of India, the course contributes to the development of critical and analytical thinking.
3. The course, supported by an inter-disciplinary approach, facilitates learning and reflecting about the multiple – and contextual – socio-cultural registers of Indian society.

Semester: III

Course Name: *Techniques of Social Research*

Course code BAPSOCSE301

Course Core(Theoretical)	Type:	Course Details: SEC-1		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The students come to know about a variety of methods and techniques that could be applied in empirical research.

2. It also provides guide of the most important principles of sociological research and the most widely used research procedures and techniques.

Semester: IV

Course Name: Western Sociological Thought

Course code BAPSOCC401

Course Core(Theoretical)	Type:	Course Details: CC-1(4)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.
3. Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge

Semester: IV

Course Name: Gender Sensitization

Course code BAPSOCSE401

Course Core(Theoretical)	Type:	Course Details: SEC-2		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. An understanding of concepts such as sex and gender by problematising common-sensual notions of gender.
2. Raising key issues of power and subordination within the purview of gender and the need for and solutions resorted to as measures to initiate change through gender-based movements.
3. Understanding issues relating to gender both at a national and global level.
4. Places gender in juxtaposition with other forms of stratification and identity such as caste, class, family and work.

Semester: V**Course Name: Religion and Society****Course code BAPSOCDSE501**

Course Type: Core(Theoretical)	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion. They will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.
2. Students will be able to make a link between texts and paraphrase their arguments and use these to communicate their ideas in research papers, projects and presentations.
3. By encompassing contemporary developments the course enables students to think about linkages between religion and society at various levels.

Semester: V

Core Paper: Marriage, Family and Kinship

Course code BAPSOCDSE502

Course Type: Core(Theoretical)	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Comprehend the coexistence of multiple perspectives in the study of family, marriage and kinship.
2. Grasp the historical evolution of kinship theories from a biological deterministic approach to culture of relatedness.
3. Develop analytical perspectives on concepts relevant for understanding kinship.

Semester: V

Generic Elective Course

Course Name: Gender and Violence

Course code BAPSOCGE501

Course Type: Core(Theoretical)	Course Details: GEC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Analyze how the social construction of gender across cultures is fundamental to several experiences of violence.

2. Engage with different theoretical perspectives and their critiques in the comprehending-individual, social, cultural, political, or economic experiences of violence.
3. Critique the dominant western white feminist theories and articulations of liberation, freedom, emancipation and justice through critically informed ideas and responses from non-western contexts.
4. Re-think and re-formulate ideas on various structures of struggles and strategies to counter gendered violence.

B.A.Programme in Sociology

Semester: V

Core Paper: Counselling

Course code BAPSOCSE501

Course Type: Core(Theoretical)	Course Details: SEC-3			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

It refers to the end result of student therapeutic process, the impact on students life and outlook.

Semester: VI

Course Name: Indian Social Problems

Course code BAPSOCDSE601

Course Core(Theoretical)	Type:	Course Details: DSEC-1(2)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The students learn to reorganize and restructure various social systems in order to deal with social problems.
2. The course develops an understanding about varied patterns of interrelations in society as being affected by social problems.
3. The under graduate students are led to interrogate possible causes and remedies of problems that dismantle social lives.

Semester: VI

Course Name: Indian Social Thought

Course code BAPSOCDSE602

Course Core(Theoretical)	Type:	Course Details: DSEC-1(2)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Ensure that students have conceptual clarity and can articulate the main debates and arguments with regard to sociology in India.
2. Acquaint the students to the continuities and contradictions in Indian society.
3. To ensure that students have understood the formation of the discipline in India and the challenges that it has faced.
4. To help students understand the history of ideas related to the analysis of Indian society.

Semester: VI**Generic Elective Course****Course Name: Economy and Society****Course code BAPSOCGE601**

Course Type: Core(Theoretical)	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Develops familiarity with different theoretical and conceptual aspects of economic sociology as a specialized branch of knowledge.
2. Develops background knowledge about the diverse ways in which economy is interlinked with other aspects of society and culture.
3. Acquire capacities to understand and analyse the transformations of economy and its key processes in a historical and comparative perspective.
4. Develops abilities to generate research questions and arguments about the intersections of economy and society.

Semester: VI**Course Name: Use of Computers in Social Research****Course code BAPSOCSE601**

Course Type: Core(Theoretical)	Course Details: DSEC-1(2)			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

Students learn critical and analytical thinking, problem solving skills, and to effectively communicate ideas.

1. Demonstrate a basic understanding of computer hardware and software.
2. Demonstrate problem-solving skills.
3. Apply logical skills to programming in a variety of languages.
4. Utilize web technologies.

Generic Elective Courses for Honours students of other disciplines**Course Learning Outcomes****Semester-I****Generic Elective Paper: Sociology Introduction I****Course Code: BAHSOCGE101**

Course Type: Core(Theoretical)	Course Details: GEC-1			L-T-P:	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The mandate of the course is to introduce the discipline to students from diverse academic and social backgrounds, trainings and capabilities.
2. The course is intended to introduce the students to a sociological ways of thinking.
3. They learn how to apply sociological concepts to the everyday life.

Semester: II**Course Name: Sociology-Introduction****Course Code: BAHSOCGE201**

Course Type: Core(Theoretical)	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. The students can apply sociology in greater society to make awareness among the common people. Students can play vital role in shaping the society in a right way.
2. It will provide a foundation for the further study of Sociology.

Semester-III

Course Name-Classical Sociology I

Course Code: BAHSOCGE301

Course Type: Core(Theoretical)	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 06	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.
3. Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge

B.A.(Honours) in Sociology

Semester: IV

Course Name: Classical Sociology II

Course Code: BAHSOCGE401

Course Type: Core(Theoretical)	Course Details: GEC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF URDU

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BA Honours in Urdu
BA Program in Urdu
Course Learning Outcomes (Translated)
First Semester

Core-1 :Lesaniat Aur Urdu Zaban ka Artaqa	The Students obtain the knowledge of multi language,origin,growth and its relation to Urdu language.
Core-2 :Urdu zaban-o- Adabkitareekh	The Students Come to know about origin and growth of Urdu language and her History.
Generic Elective and Programme :Urdu zaban-o- AdabkiMukhtasartareekh.	The Students Come to know about origin and growth of Urdu language and her History.
AECC(MIL for Programme): Prose and Poems	The Students learn the both Prose and Poem

Second Semester

Core-3 :Classici Urdu Nasr	The Students acquire the knowledge of classical Urdu prose and its in origins and groth.
Core-4 :Classici Urdu Ghazal	The Students acquire the knowledge of classical Urdu prose and its importance.
Generic Elective and Programme : Urdu Dastan Aur Novel	Dastan- The Students obtain the knowledge of social,cultural,political,behavioural and business method of past. Novel- The Students learn to Use strategies and skill in daily basis life.
AECC-2 (MIL for Hons, Program & Generic): Prose and Poems	The Students learn the both Prose and Poem

Third semester

Core-5 :Jadeed Urdu Ghazals	The Students acquire the knowledge of new Urdu Ghazals and its characteristics.
Core-6 :Nazm:Ibteda se Aligarh Tahreek Tak	The Students Come to know of Urdu Nazm From the period of beginning to Aligarh Movement.
Core-7 :Jadeed Urdu Nazm	The Students acquire the knowledge of new and Modern Urdu Type of Nazm and its characteristics.
SEC-1-301 : Urdu Mass Media	The Students Understand the print and electronic media and makes her career in this field.

SEC-1-302 : Urdu Software and Basic Computer	The Students acquire the knowledge of Urdu Software Of Computer and its Basic Knowledge Of Computer.
Generic Elective and Programme-3A : Afsana Aur Drama	Afsana- The Students learn to Use strategies and skill in daily basis life. Drama- The Students Come to know to organize stage drama and the learn various techniques of drama and going through in film industries also.
Generic Elective-3B : Urdu Ghazals	The Students acquire the knowledge of new Urdu Ghazals and its characteristics.
Programme SEC : Urdu me tarjama Nigari.	The Students acquire the knowledge of the proper translation and skill of multi languages and learn to make translation machine and Unicode.
AECC-2 (MIL-2 for Programme : Ghair Afsanwinasr, Inshaiya, Mazmoon and Swaneh.	The Students Come to know how to write an essay and an articles and the students also Understand the whole life(born to death) details of the poets and writers and a common person also.

Fourth semester

Core-8 : Urdu Tanqeed: Taraqqi Pasand tahreek se qabal	The Students Come to know to take proper decision in right way and understand the Urdu critics before progressive movement.
Core-9 : Urdu Dastan	The Students obtain the knowledge of social, cultural, political, behavioural and business method of past.
Core-10 : Urdu Novel	The Students learn to Use strategies and skill in daily basis life.
SEC-2-401 : Ilm-ul-Urooz-o-Ilm-ul-Bayan ka mafhoom	Its teach the students the poetic field and the learn various techniques to manage the pattern of syllables, sound ,tone, stress and rhythms in poetry.
SEC-2-402 : Hindustani film Aur Urdu Adab	The Students come to know about the relation between film and Urdu literature and students will be a lyrics, story and dialogue writers also.
Generic Elective-4A : Urdu Masnavi Aur Nazm	The Students acquire the knowledge of new Urdu Nazm and its characteristics obtain the
Generic Elective-4C : Urdu Qasidah Aur Marsiah	The Students obtain the knowledge of to manage his/her superior and convince them easily to any concern

Generic Elective-4B: Maqala,MaktoobAurkhaka	The Students come to know how to write a thesis and different type of letters in different situation and the students also Understand the whole life(born to death) details of the poets and writers and a common person also.
Programe :Urdu Tanqeed	The Students Come to know to take proper decision in right way and understand the various technique to criticize on different topics.
SEC-2 (for Programe) : Hindustani film Aur Urdu Adab	The Students come to know about the relation between film and Urdu literature and students will be a lyrics,story and dialogue writers also.

Fifth semester

Core-11 :UrduAfsana	The Students learn to Use strategies and skill in daily basis life.
Core-12 :Urdu Drama	The Students Come to know to organize stage drama and the learn various techniques of drama and going through in film industries also.
DSE-501 : Prem Chand ka khususiMotelya	The Students Come to know about Prem Chand very well by his all activities and literary works.
DSE-502 : Sir Syed AurUnkeRefqakaar ka Motelya	The Students Come to know about Sir Syed AurUnkeRefqakaar very well by his all activities and literary works.
DSE-503 : Meer Taqi Meer ka khususiMotelya	The Students understand to Meer Taqi Meer very well by his all activities and literary works.
DSE-504 : Mirza Ghalib ka khususiMotelya	The Students understand to Mirza Ghalib very well by his all activities and literary works.
DSE-505: Allama Iqbal ka khususiMotelya	The Students understand to Sir Md.Iqbal very well by his all activities and literary works.
DSE-1 : Urdu Ghazal	The Students acquire the knowledge of new Urdu Ghazals and its characteristics.
DSE-2-for Programe :Maqala,MaktoobAurkhaka	The Students come to know how to write a thesis and different type of letters in different situation and the students also Understand the whole life(born to death) details of the poets and writers and a common person also.
DSE-3 : Generic Elective- Sir Syed	The Students Come to know about Sir Syed

AurUnkeRefqakaar ka Motelya	AurUnkeRefqakaar very well by his all activities and literary works.
DSE-4-Generic Elective : Meer Taqi Meer ka khususiMotelya	The Students understand to Meer Taqi Meer very well by his all activities and literary works.
DSE-5 : Meer Taqi Meer ka khususiMotelya	The Students understand to Meer Taqi Meer very well by his all activities and literary works.
DES-3- Generic Elective – : Urdu electronic media	<ol style="list-style-type: none"> 1) The Students Understand the print and electrnic media and Journalism- a).News Anchor b).News Reader 2) Mass Communication in Urdu 3) Broadcasting and makes her career in this field.

6th semester

Core-13 : Urdu Qasidah Aur Marsiah	The Students obtain the knowledge of to manage his/her superior and convince them easily to any concern
Core-14 :Swaneh,KhudnawishtSwaneh and Khaka	The students also Understand the whole life(born to death) details of the poets and writers and a common person also.
DSE-601 :Urdu Tanz-o-Mezah	The Students Come to know to impact of Prominent satirist and humorist, Poem and prose style.
DSE-602 :AdbiTehrikaat	The Students Come to know to impact of Movements and its different Curricullam in Urdu literature.Further the Students acquire the knowledge about day by day activities.
DSE-603 :Urdu Tanqeed:TaraqquiPasandtahreekta haal	The Students Come to know to take proper decision in right way and understand the urdu critics from progressive movement to present Era.
DSE-604 :GhairAfsanwinasr,Inshaiya,Mazmoon and Swaneh.	The Students Come to know how to write an essay and an articles and the students also Understand the whole life (born to death) details of the poets and writers and a common person also.
DSE-605 :Maktoob Nigari Tareekh-o- Tanqeed	The Students come to know how to write a Letter in different situation and the students also know about The Origin and Growth of Urdu Letter Writing.

DSE-4A : for Programme : Urdu QasidahAurMarsiah	The Students obtain the knowledge of to manage his/her superior and convince them easily to any concern
DSE-4- for Programme : Urdu MasnaviAurNazm	The Students acquire the knowledge of new Urdu Nazm and its characteristicsobtain the knowledge of social,cultural,political,behavioural and business method of past in poetry Style.
SEC-4(A) - for Programme : Urdu Mazmoon Nigari	The Students Come to know how to write an essay or an articles.
SEC-4(B) - for Programme :Ilm-ul-Urooz-o-Ilm-ul-Bayan ka mafhoom	Its teach the students the poetic field and the learn various techniques to manage the pattern of syllablus, sound, tone, stress and rhythms in poetry.
DSE-: B3- Generic Elective :Urdu Tanz-o-Mezah	The Students Come to know to impact of Prominent satirist and humorist, Poem and prose style.
DSE-:B4- : Generic Elective : GhairAfsanwinasr,Inshaiya,Mazmoon and Swaneh.	The Students Come to know how to write an essay and articles and the students also Understand the whole life (born to death) details of the poets and writers and a common person also.
DSE-B-5 : Generic Elective : Maktoob Nigari Tareekh-o- Tanqeed	The Students come to know how to write a Letter in different situation and the students also know about The Origin and Growth of Urdu Letters Writing.

Urdu (PG)

Semester wise Paper name and Course Learning Outcomes (Translated)

First Semester

Paper name and code	Outcomes
MAURDUC101 :LesaniatAur Urdu Zaban ka Artaqa	The Students obtain the knowledge of multi language,origin,growth and its relation to Urdu language.
MAURDUC102 :Urdu zaban-o- Adabkitareekh	The Students Come to know about origin and growth of Urdu language and her History.
MAURDUC103 : Urdu Ghazal (Classical)	The Students acquire the knowledge of classical Urdu prose and its importance.
MAURDUC104 :UrduNazm : Shahr-e-Aashob,Qasidah,Marsiya,Masnavi,Rubai	The Students acquire the knowledge of new ,Modern and various types of Urdu Nazm and its characteristics.
MAURDUC105 :UrduNazm : (Nazir Se Iqbal Tak)	The Students Come to know about origin and growth of Urdu Nazm From the Period of Nazir Akbar Abadi to Sir.Md.Iqbal Era.

Second Semester

Paper name and code	Outcomes
MAURDUC-201 : Urdu Dastan	The Students obtain the knowledge of social, cultural, political, behavioural and business method of past.
MAURDUC202 :Urdu Novel	The Students learn to Use strategies and skill in daily basis life.
MAURDUC203 :UrduAfsana	The Students learn to Use strategies and skill in daily basis life.
MAURDUC204 :Urdu Drama	The Students Come to know to organize stage drama and thelearn various techniques of drama and going through in film industries also.
MAURDUMIE201 :Urdu zaban-o- Adabkitareekh	The Students Come to know about origin and growth of Urdu language and her History.

Third semester

Paper name and code	Outcomes
MAURDUC301 :Urdu Tanqeed	The Students Come to know to take proper decision in right way and understand the various technique to criticize on different topics.
MAURDUC302 :Jadeed Urdu Ghazals	The Students acquire the knowledge of new Urdu Ghazals and its characteristics.
MAURDUMJE301 : Urdu Nazm: Taraqqi Pasand Tahreek TaHaal	The Students acquire the knowledge of Urdu Nazm and its characteristics from Progressive Movement to Present Era.
MAURDUMJE302 :Dakaniyaat	The Students Come to know about origin and growth of Urdu language and her History in Southern India.
MAURDUMJE303 :Adbi Tehrikaat	The Students Come to know to impact of Movements and its different Curriculum in Urdu literature. Further the Students acquire the knowledge about day by day activities.
MAURDUMJE304 : Urdu me Tarjama Nigari.	The Students acquire the knowledge of the proper translation and skill of multi languages and learn to make translation machine and Unicode.

Fourth semester

Paper name and code	Outcomes
MAURDUC401 :Taneesee Adab	The Students Come to know about the role of women in Urdu Literature and the Students acquire the knowledge of Feminism also.
MAURDUC402 : Urdu Tanz-o-Mezah	The Students Come to know to impact of Prominent satirist and humorist, Poem and prose style.
MAURDUMJE401 : Bengal Ka Urdu Adab	The Students Come to know about origin and growth of Urdu language and Literature and its impact,activities and characteristic in Bengal.
MAURDUMJE402 : Iqbal ka Khususi Motala	The Students understand to Sir Md.Iqbal very well by his all activities and literary works.
MAURDUMJE403 : Meer Taqi ka Khususi Motala	The Students understand to Meer Taqui Meer very well by his all activities and literary works.

MAURDUMJE404 : Prem Chand ka KhususiMotala	The Students Come to know about Prem Chand very well by his all activities and literary works.
MAURDUC403: Term Paper	The implementation of Term Paper has positive effects on students' written production, and the emphasis on the writing process has positive effects on students'research works and oral production that written practice supports oral proficiency and it is feasible to integrate language skills.
MAURDUC404:Desertation	The implementation of Dissertation has positive effects on students' written production, and the emphasis on the writing process has positive effects on students'research works and oral production that written practice supports oral proficiency and it is feasible to integrate language skills.

Ph.D. in Urdu
Course Learning Outcomes for Coursework (Translated)

Course Name-	Course Code	Learning Outcome
Research Methodology	PHDURDUC101	After going through the course the students will be able to: :1.Know various methods of literary research. 2. Carry out review of related literature. 3.Know the Process of data collection in literary research. 4.acquire competencies for analyzing the collected data in literary research.
Research and Publication Ethics	PHDURDUC102	After going through the course the students will be able to: 1.know the concept of Philosophy,Ethics and Research Ethics. 2.Know the concept of Publication Ethics. 3.understand the concept of research integrity and misconduct. 4. use research integrity for better standard of research

		<p>works.</p> <p>5.find out the authentic sources of information related to literary research.</p> <p>6. use plagiarism software for checking and removing similarity index.</p> <p>7. aware about publication ethics and publication misconduct.</p> <p>8. apply research and publication ethics in the writing.</p> <p>9.apply online tools for preparing refrence and bibliography.</p>
Computer Application	PHDURDUC103	<p>After going through the course the students will be able to:</p> <p>1.Make students familiar with the use of applications software in research.</p>
Advanced Studies in Urdu Literature	PHDURDUDSE101	<p>After going through the course the students will be able to:</p> <p>Understand and analytical Studies of Advanced Urdu Literature and literary research.</p>
Literary Trends in Urdu Literature	PHDURDUDSE102	<p>After going through the course the students will be able to:</p> <p>Understand to various Literary trends and their aspects in Urdu Literature .</p>

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF COMMERCE**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

B Com Honours
Course Learning Outcomes:

B.Com Honours: 1st Semester		
COURSE CODE	COURSE TITLE	COURSE OUTCOME
Course Code: BCOMHC101	FINANCIAL ACCOUNTING	<p>This course provides conceptual knowledge of financial accounting and the techniques for preparing accounts in different types of business organizations. After completing the course, the student shall be able to:</p> <p>CO1: understand the theoretical framework of accounting.</p> <p>CO2: learn the accounting system of Consignment Business</p> <p>CO3: learn accounting for hire purchase transactions and installment payment system.</p> <p>CO4: understand the concept of Sectional and Self Balancing Ledgers</p> <p>CO5: understand the system of accounting for dissolution of a partnership firm in details</p>
Course Code: BCOMHC102	BUSINESS LAWS	<p>Course objective is to impart basic knowledge of the important business laws relevant for conduct of general business activities in physical and virtual spaces along with relevant case laws. After completing the course, the student shall be able to:</p> <p>CO1: understand basic aspects of contracts for making the agreements, contracts and subsequently enter valid business propositions.</p> <p>CO2: recognize and differentiate the special contracts and identify their appropriate usage at varied</p>

		<p>business scenarios.</p> <p>CO3: understand the legitimate rights and obligations under The Sale of Goods Act</p> <p>CO4: apply their skills to initiate entrepreneurial ventures as LLP</p> <p>CO5: understand the fundamentals of Internet based activities under the Information and Technology Act.</p>
Course Code: BCOMHGE101	MICRO ECONOMICS	<p>The objective of the course is to familiarize the students with the basic concepts of microeconomics and to enable them to understand the uses of such concepts in business applications. After completing the course, the student shall be able to:</p> <p>CO1: understand the concepts of demand and supply and determination of equilibrium price through the interaction of market forces.</p> <p>CO2: analyze different approaches explaining the theoretical foundation of consumer behaviour.</p> <p>CO3: understand the concepts of cost, nature of production and its relationship to Business operations.</p> <p>CO4: understand the concepts of different market forms and to analyze short run and long run equilibrium conditions for different market forms.</p> <p>CO5: understand and analyze different theories related to determination of factor prices.</p>
B.Com Honours: 2nd Semester		
Course Code: BCOMHC201	CORPORATE	The objective of the course is to

	ACCOUNTING	<p>acquire the conceptual knowledge of corporate accounting and to understand the various techniques of preparing accounting and financial statements. After completing the course, the student shall be able to:</p> <p>CO1: develop an understanding of accounting for share capital and debentures</p> <p>CO2: prepare financial statements of a company</p> <p>CO3: develop an understanding of valuation of shares.</p> <p>CO4: understand the accounting for amalgamation and liquidation of companies</p> <p>CO5: prepare consolidated balance sheet for Holding company.</p>
Course Code: BCOMHC202	CORPORATE LAWS	<p>The objective of the course is to impart basic knowledge of the provisions of the Companies Act 2013 and the Depositories Act, 1996 and to enable students to analyse different case studies related to different issues of corporate law. After completing the course, the student shall be able to:</p> <p>CO1: understand the regulatory aspects and the broader procedural aspects involved in different types of companies covering the Companies Act 2013 and Rules thereunder.</p> <p>CO2: follow the basic legal documents and their usage essential for operations and management of company.</p> <p>CO3: enable the students to</p>

		<p>synthesis company processes, meetings and decisions.</p> <p>CO4: equip the students with framework of dividend distribution and role of auditors in a company.</p> <p>CO5: comprehend and evaluate working of depositories and their functions in stock markets.</p>
Course Code: BCOMHGE201	MACRO ECONOMICS	<p>The objective of the course is to provide the students with knowledge of enriching concepts and variables of macro- economics; appreciate the impact of labor market, money market and foreign exchange on working of an economy and understand the modern tools of macro-economic analysis.</p> <p>CO1: describe the nature and scope of Macro Economics, Income, Expenditure and their components and determinants.</p> <p>CO2: expose fiscal and monetary policy implications through IS-LM framework in short run and long run.</p> <p>CO3: comprehend the different theories of demand for money, supply of money approach and working of money multiplier.</p> <p>CO4: elucidate causes and effects of different types of inflation and trade-off between inflation and unemployment.</p> <p>CO5: describe the role of saving and investment in different size of economies on trade and exchange rate and rate of interest.</p>
B.Com Honours: 3rd Semester		

Course Code: BCOMHC301	HUMAN RESOURCE MANAGEMENT	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand basic nature and importance of human resource management.</p> <p>CO2: analyze the current theory and practice of recruitment and selection.</p> <p>CO3: realize the importance of performance management system in enhancing employee performance.</p> <p>CO4: recommend actions based on results of the compensation analysis and design compensation schemes that are cost effective, that increase productivity of the workforce, and comply with the legal framework.</p> <p>CO5: understand role of modern HRM in meeting challenges of changing business environment.</p>
Course Code: BCOMHC302	INCOME TAX LAW AND PRACTICE	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basic concepts in the law of income tax and determine the residential status of different persons.</p> <p>CO2: identify the five heads in which income is categorised and compute income under the heads <u>Salaries</u> and <u>Income from House Property</u>.</p> <p>CO3: compute income under the head <u>Profits and gains of business or profession</u>, <u>Capital gains</u> and <u>Income from other sources</u>.</p> <p>CO4: understand clubbing provisions, aggregate income after set-off and carry forward of losses, and deductions allowed under the Income Tax Act; and further to</p>

		<p>compute taxable income and tax liability of individuals and firms.</p> <p>CO5: develop the ability to file online returns of income.</p>
Course Code: BCOMHC303	MANAGEMENT PRINCIPLES AND APPLICATIONS	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the evolution of management and apprehend its effect on future managers.</p> <p>CO2: analyze how organizations adapt to an uncertain environment and decipher decision making techniques managers use to influence and control the internal environment.</p> <p>CO3: comprehend the changes happening in organization structure over time.</p> <p>CO4: analyze the relationship amongst functions of management i.e. planning, organizing, directing and controlling. CO5: appreciate the changing dynamics of management practice.</p>
Course Code: BCOMHGE301	BUSINESS STATISTICS	<p>After completing the course, the student shall be able to:</p> <p>CO1: acquire a fair degree of proficiency in comprehending statistical data, processing and analysing it using descriptive statistical tools.</p> <p>CO2: gather knowledge about various probability concepts and distributions and their business applications.</p> <p>CO3: understand the relationship between two variables using</p>

		<p>concepts of correlation and regression and its use in identifying and predicting the variables.</p> <p>CO4: develop an understanding of the index numbers and their utility in daily life and stock market.</p> <p>CO5: become aware of the patterns revealed by the time series data and to use it to make predictions for the future.</p>
Course Code: BCOMHSE301	E-COMMERCE	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basics of E-commerce, current and emerging business models.</p> <p>CO2: familiarize with basic business operations such as sales, marketing, HR etc. on the web.</p> <p>CO3: enhance the students' skills for designing and developing website.</p> <p>CO4: identify the emerging modes of e-payment.</p> <p>CO5: understand the importance of security, privacy, ethical and legal issues of e-commerce.</p>
B.Com Honours: 4th Semester		
Code: BCOMHC401	Course Name: COST ACCOUNTING Course	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand thoroughly the conceptual framework of Cost Accounting; identification of differences between different financial and cost accounting; cost concepts and elements of cost; preparation of cost sheet.</p> <p>CO2: understand the accounting and control of material and labour cost.</p>

		<p>CO3: develop ability to understand classification, allocation, apportionment and absorption of overheads in cost determination; under and over absorption of overheads; treatment of various item of overheads</p> <p>CO4: develop ability to calculate the cost of products, jobs, contracts, processes and services after understanding the basic concepts and processes involved in them.</p> <p>CO5: understand cost accounting</p>
Course Code: BCOMHC402	Course Name: BUSINESS MATHEMATICS	<p>After completing the course, the student shall be able to:</p> <p>CO1: comprehend the concept of systematic processing and interpreting the information in quantitative terms to arrive at an optimum solution to business problems.</p> <p>CO2: develop proficiency in using different mathematical tools (matrices, calculus, linear programming, and mathematics of finance) in solving daily life problems.</p> <p>CO3: acquire competence to use computer for mathematical computations, especially with Big data.</p> <p>CO4: obtain critical thinking and problem-solving aptitude.</p> <p>CO5: evaluate the role played by mathematics in the world of business and economy.</p>
Course Code: BCOMHC403	Course Name: COMPUTER APPLICATIONS IN BUSINESS	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the various concepts and terminologies used in computer networks and internet and</p>

		<p>be aware of the recent developments in the fast changing digital business world.</p> <p>CO2: handle document creation for communication.</p> <p>CO3: acquire skills to create and make good presentations</p> <p>CO4: make various computations in the area of accounting and finance and represent the business data using suitable charts. S/He should be able to manipulate and analyze the business data for better understanding of the business environment and decision making</p> <p>CO5: understand and apply the various database concepts and tools in the related business areas with the help of suggested popular software.</p>
Course Code: BCOMHGE401	Course Name: Indian Economy	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basic features of Indian Economy</p> <p>CO2: Understand different issues of Indian agricultural sector and food security system prevailing in the country</p> <p>CO3: Address the issues of Industrial development of the country and to gauge the impact of impact of new industrial policy on industrial sector of the country</p> <p>CO4: conceptualize Indian Financial sector and address global issues related to economic development of the country</p> <p>CO5: Know about the Process of economic planning and its reforms in the context of Indian economy.</p>

Course Code: BCOMHSE401	Course Name: ENTREPRENEURSHIP DEVELOPMENT	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the concept of entrepreneurship in the context of Indian economic scenario.</p> <p>CO2: link the individual's capability and strength as a guiding factor towards entrepreneurial orientation.</p> <p>CO3: understand social support system for gaining strength towards entrepreneurial preferences.</p> <p>CO4: understand entrepreneurial process for initiating new venture creation.</p> <p>CO5: understand various dimensions of managing a business enterprise once it is formed.</p>
B.Com Honours: 5th Semester		
Course Code: BCOMHC501	Course Name: PRINCIPLES OF MARKETING	<p>After completing the course, the student shall be able to:</p> <p>CO1: develop understanding of basic concepts of marketing, marketing philosophies and environmental conditions effecting marketing decisions of a firm.</p> <p>CO2: understand the dynamics of consumer behaviour and process of market selection through STP stages.</p> <p>CO3: understand and analyze the process of value creation through marketing decisions involving product development.</p> <p>CO4: understand and analyze the process of value creation through marketing decisions involving product pricing and its distribution.</p> <p>CO5: understand and analyze the</p>

		process of value creation through marketing decisions involving product promotion and also to equip them with the knowledge of various developments in marketing area that may govern marketing decisions of a firm.
Course Code: BCOMHC502	Course Name: Fundamentals of Financial Management	<p>After completing the course, the student shall be able to:</p> <p>CO1 - explain the nature and scope of financial management as well as time value of money and risk return trade off</p> <p>CO2 – analyze capital budgeting process and capital budgeting techniques</p> <p>CO3 - estimate various capital structure theories and factors affecting capital structure decisions in a firm</p> <p>CO4 - critically examine various theories of dividend and factors affecting dividend policy</p> <p>CO5 - evaluate working capital requirement</p>
Course Code: BCOMHACDSE501	Course Name: MANAGEMENT ACCOUNTING	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand thoroughly the conceptual framework of Management Accounting; identification of differences between different forms of accounting— Financial, Cost and Managerial; distinction between cost control and cost reduction.</p> <p>CO2: understand the concept of marginal cost and marginal costing; preparation of income statements using absorption and variable costing; learning of cost-volume-profit analysis and break-even</p>

		<p>analysis using mathematical and graphical approaches; and the application in businesses.</p> <p>CO3: understand the concept of relevant and irrelevant costs and make decisions related to different business situations using marginal costing and differential costing techniques.</p> <p>CO4: understand budgetary control system as a tool of managerial planning and control; ability to prepare various types of budget. Ability to understand standard costing system as a tool of managerial control; calculation of variances in respect of each element of cost and sales; control ratios.</p> <p>CO5: understand management accounting issues of Responsibility accounting, Divisional performance measurement and Transfer pricing.</p>
Course Code: BCOMHACDSE502	Course Name: Advanced Financial Accounting	<p>After completing the course, the student shall be able to:</p> <p>CO1: develop understanding of basic concepts of Branch and departmental accounting and apply the techniques learnt for recording the transactions related to branches and departments of business organisations.</p> <p>CO2: Understand the basic concept and purpose of Investment accounting and Maintain systematic records of Investments made. Students will also learn the process of maintaining accounts for voyages.</p> <p>CO3: understand the concepts and need of having different accounting structure for local bodies and to apply the techniques of accounting</p>

		<p>in practical field .</p> <p>CO4: understand and analyze the process of ascertaining insurance claims for loss of stock and loss of profit policies.</p> <p>CO5: understand different concepts of accounting for royalties and to apply the accounting process in practical field. Students will also learn the accounting process for sale on approval system.</p>
Code: BCOMHACDSE503	Course Name: Accounting Theory Course	<p>After completing the course, the student shall be able to:</p> <p>CO1: Develop understanding of basic concepts of accounting theory and practice.</p> <p>CO2: Understand the basic concept and purpose accounting concepts and conventions.</p> <p>CO3: understand the concepts related to accounting income and its measurement.</p> <p>CO4: understand and analyze the different concepts of capital and its relation to income, financial statement and its limitations</p> <p>CO5: understand different concepts of assets and liabilities, their recognition criterion and need for their valuation.</p>
Code: BCOMHFIDSE501	Course Name: Financial Market Course	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the meaning and scope of financial markets as well as institutions in India.</p> <p>CO2: understand the concepts of Money Market and Capital Market</p> <p>CO3: explain Commercial Banking and its Current developments.</p>

		<p>CO4: explain concept of Non-Banking Financial Companies (NBFC's)</p> <p>CO5: examine the Financial Services Industry</p>
Code: BCOMHFIDSE502	Course Name: Banking and Insurance Course	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the Concept of Risk, it's types, sources and measurements.</p> <p>CO2: learn the Concepts and Principles of Insurance and its operations.</p> <p>CO3: develop insights into E-banking services and Banking sector reform.</p> <p>CO4: examine the Legal aspects of Insurance contract and Actuaries</p> <p>CO5: familiarize with the Regulatory Framework of Insurance</p>
Course Code: BCOMHFIDSE503	Course Name: Advanced Financial Management	<p>After completing the course, the student shall be able to:</p> <p>CO1: Develop understanding of basic concepts of Indian capital market and its different components.</p> <p>CO2: Understand the basic concept and purpose operating, financial and combined leverages.</p> <p>CO3: understand the concepts and techniques related to financial statement analysis.</p> <p>CO4: understand and analyze the different concepts of capital structure and relevant theoretical models with practical exposure.</p>

		CO5: understand different concepts of cash and receivables management.
Course Code: BCOMHTXDSE501	Course Name: Tax Planning and Management	<p>After completing the course, the student shall be able to:</p> <p>CO1: Understand basic concepts of tax planning, tax management, tax evasion and tax avoidance.</p> <p>CO2: Understand the concepts of tax planning in respect of salary and house property .</p> <p>CO3: understand the concepts of tax planning for a new business with reference to its location and to know about the related provisions for FTZ and SEZ .</p> <p>CO4: understand the concepts of tax planning for a business with reference to its nature and to know about the relevant provisions for companies belonging to different sectors.</p> <p>CO5: understand the concepts of tax planning and available tax concessions with reference to amalgamation, merger and demerger of companies and to know about implication of tax planning for decisions related to make or buy, owning or leasing, repairing and replacement of assets.</p>
Course Code: BCOMHTXDSE502	Course Name: Tax Practice and Procedures	<p>After completing the course, the student shall be able to:</p> <p>CO1.To know about PAN, different ITR forms, filing of returns and assessment procedures.</p> <p>CO2: Understand the concepts of TDS, TCS, tax recovery and settlement process.</p>

		<p>CO3: understand different aspects of GST returns and related payments, refunds and penalties.</p> <p>CO4: understand the process of tax recovery and settlement under GST.</p> <p>CO5: understand the concepts and procedures of customs duty.</p>
Course Code: BCOMHTXDSE503	Course Name: Income Tax Return Filing	<p>Some of the course learning outcomes that learners of this course are required to demonstrate runs thus:</p> <p>CO1: Identify deviant use of income tax portal of government of India</p> <p>CO2: Filing of Income Tax Returns</p> <p>CO3: Recognize their own ability to improve their own competence in the field of Taxation</p> <p>CO4: Understand the process of E-filing of Income Tax Returns</p> <p>CO5: Tax Planning ability</p>
B.Com Honours 6th Semester		
Course Code: BCOMHC601	Course Name: Auditing and Corporate Governance	<p>After completing the course, the student shall be able to:</p> <p>CO1: differentiate between different aspects of auditing especially for internal check, internal control and for overall corporate governance.</p> <p>CO2: understand the concept of corporate governance in organisations and its essence for management.</p> <p>CO3: provide and assimilate information leading to failure of organisation and corporate scams.</p> <p>CO4: comprehend the governance</p>

		<p>framework for an organisation provided by different regulatory bodies in India and Abroad.</p> <p>CO5: understand the corporate governance framework in India</p>
Course Code: BCOMHC602	Course Name: Indirect Tax Laws	<p>After completing the course, the student shall be able to:</p> <p>CO1: connect with the genesis of goods and services tax (GST), decipher the constitutional amendment carried out to install GST in India and comprehend the composition and working of GST council.</p> <p>CO2: understand the meaning of supply under GST law, differentiate between intra-state and inter-state supply, comprehend rules related to the place of supply and compute the value of supply.</p> <p>CO3: comprehend the utilization of input tax credit, and the reverse charge mechanism of paying GST and to know the procedure for claiming refund under GST law.</p> <p>CO4: understand the provisions for registration under GST along with special provisions such as those related to anti-profiteering; avoidance of dual control; e-way bills and penalties.</p> <p>CO5: know the basic concepts of Customs Act and to compute the assessable value for charging customs duty.</p>
Course Code: BCOMHACDSE601	Course Name: Corporate Reporting	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basics of corporate reporting and its role in business world.</p>

		<p>CO2: understand the conceptual framework of corporate reporting and different principles underlying corporate reporting.</p> <p>CO3: understand different Indian accounting standards and their importance.</p> <p>CO4: understand different aspects of IFRS and its convergence with Indian accounting standards.</p> <p>CO5: understand the basics of revenue and liabilities-based accounting standards and also about some other related accounting standards in India</p>
<p>Course Code: BCOMHACDSE602</p>	<p>Course Name: Advanced Cost Accounting</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1.conceptualize different aspects of marginal costing and its difference with other costing techniques and apply different tools of marginal costing in taking appropriate decisions.</p> <p>CO2: Understand the concepts of standard costing and variance analysis and measure relevant deviations.</p> <p>CO3: understand the concepts and applications of process costing.</p> <p>CO4: understand the concepts of uniform costing, make inter firm comparison with relevant tools and understand the concepts of operating costing and its application in selected areas of operation.</p> <p>CO5: understand the concepts and different aspects of cost audit.</p>

Course Code: BCOMHACDSE603	Course Name: Computerised Accounting	<p>After completing the course, the student shall be able to:</p> <p>CO1.To know the basics of ERP and its application.</p> <p>CO2: Understand the concepts and applications of computerized inventory management.</p> <p>CO3: understand different aspects of recording day to day transactions in ERP.</p> <p>CO4: understand the process of computerized receivables and payables management.</p> <p>CO5: understand the concepts of management information system and its applications in ERP.</p>
Course Code: BCOMHFIDSE601	Course Name: Financial Services	<p>After completing the course, the student shall be able to:</p> <p>CO1: Understand the concepts and applications of various financial service.</p> <p>CO2: comprehend different aspects of pension schemes.</p> <p>CO3: know the various aspects of fund based and fee based financial services.</p> <p>CO4: understand the concepts of financial regulators and their functions in financial market.</p>
Course Code: BCOMHFIDSE602	Course Name: Investment Analysis	<p>After completing the course, the student shall be able to:</p> <p>CO1: explain investment environment and concept of return & risk.</p> <p>CO2: understand bond valuation & role of credit rating agencies.</p>

		<p>CO3: examine equity approaches.</p> <p>CO4: analyze two securities portfolio using Harry Markowitz model, Calculating portfolio risk and return, explaining CAPM and evaluating Mutual Funds and Financial derivatives.</p> <p>CO5: evaluate investors protection framework</p>
Operation Course Code: BCOMHFIDSE603	Course Name: Capital Market	<p>After completing the course, the student shall be able to:</p> <p>CO1: learn the basics of investing in stock market, the investment environment as well as risk & return</p> <p>CO2: analyze different investment strategies</p> <p>CO3: analyze different aspects of investment in bond</p> <p>CO4: learn the process of derivatives trading in India</p> <p>CO5: learn investment process in mutual fund and NPS</p>
Course Code: BCOMHTXDSE601	Course Name: Assessment of Corporate Bodies	<p>After completing the course, the student shall be able to:</p> <p>CO1.understand different aspects of company assessee.</p> <p>CO2: compute taxable income of companies and relevant tax provisions related to it.</p> <p>CO3: know available deductions and set off provisions related to corporate assesses.</p> <p>CO4: know the provisions of capital gains relevant to corporate assesses.</p>

		CO5: know the provisions of income from other sources and special provisions related to FTZ,SEZ and EOU.
Course Code: BCOMHTXDSE602	Course Name: Tax Authority and Jurisdiction	<p>After completing the course, the student shall be able to:</p> <p>CO1: know about different income tax authorities and their appointment procedures.</p> <p>CO2: understand the jurisdiction of income tax authorities.</p> <p>CO3: know about powers of income tax authorities.</p> <p>CO4: understand the process appointment, control and jurisdiction of GST authority.</p> <p>CO5: know the powers of GST authority and understand different aspects of GST audit.</p>
Course Code: BCOMHTXDSE603	Course Name: Goods and Services Tax Return Filing	<p>After completing the course, the student shall be able to:</p> <p>CO1: learn the basics of GST Registration</p> <p>CO2: learn the submission process of Monthly GST Returns</p> <p>CO3: learns the submission process of Outward Supply</p> <p>CO4: learns e-payment of GST</p> <p>CO5: learns generations of E-waybills and annual returns</p>

B Com Program

Course Learning Outcomes

B.Com Program: 1st Semester		
Course Code: BCOMPC101	Course Name: FINANCIAL ACCOUNTING	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the theoretical framework of accounting.</p> <p>CO2: learn the accounting system of Consignment Business.</p> <p>CO3: learn accounting for hire purchase transactions and installment payment system.</p> <p>CO4: understand the concept of Sectional and Self Balancing Ledgers.</p> <p>CO5: understand the system of accounting for dissolution of a partnership firm in details.</p>
Course Code: BCOMPC102	Course Name: Business Organisation and Management	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the foundation of Indian Business.</p> <p>CO2: explain and determine different types of Business Enterprises.</p> <p>CO3: learn managing styles of Organization.</p> <p>CO4: understand the concepts of Leadership, Motivation and Control.</p> <p>CO5: learns different functional areas of Management.</p>
B.Com Program: 2nd Semester		
Course Code: BCOMPC201	Course Name: Business Laws	<p>After completing the course, the</p>

		<p>student shall be able to:</p> <p>CO1: understand basic aspects of contracts for making the agreements, contracts and subsequently enter valid business propositions.</p> <p>CO2: recognize and differentiate the special contracts and identify their appropriate usage at varied business scenarios.</p> <p>CO3: understand the legitimate rights and obligations under The Sale of Goods Act</p> <p>CO4: apply their skills to initiate entrepreneurial ventures as LLP</p> <p>CO5: understand the fundamentals of Internet based activities under the Information and Technology Act.</p>
Course Code: BCOMPC202	Course Name: Business Mathematics and Statistics	<p>After completing the course, the student shall be able to:</p> <p>CO1: comprehend the concept of systematic processing and interpreting the information in quantitative terms to arrive at an optimum solution to business problems.</p> <p>CO2: develop proficiency in using different mathematical tools (matrices, calculus, linear programming, and mathematics of finance) in solving daily life problems.</p> <p>CO3: acquire competence to use computer for mathematical computations, especially with Big data.</p> <p>CO4: obtain critical thinking and problem-solving aptitude.</p>

		CO5: evaluate the role played by mathematics in the world of business and economy.
B.Com Program: 3rd Semester		
Course Code: BCOMPC301	Course Name: Company Law	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the regulatory aspects and the broader procedural aspects involved in different types of companies covering the Companies Act 2013 and Rules thereunder.</p> <p>CO2: follow the basic legal documents and their usage essential for operations and management of company.</p> <p>CO3: enable the students to synthesis company processes, meetings and decisions.</p> <p>CO4: equip the students with framework of dividend distribution and role of auditors in a company.</p> <p>CO5: comprehend and evaluate working of depositories and their functions in stock markets.</p>
Course Code: BCOMPC302	Course Name: Income Tax Law and Practice	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basic concepts in the law of income tax and determine the residential status of different persons.</p> <p>CO2: identify the five heads in which income is categorised and compute income under the heads ‘Salaries’ and ‘Income from House Property’.</p> <p>CO3: compute income under the head ‘Profits and gains of business or profession’, ‘Capital gains’ and ‘Income from other sources’.</p>

		<p>CO4: understand clubbing provisions, aggregate income after set-off and carry forward of losses, and deductions allowed under the Income Tax Act; and further to compute taxable income and tax liability of individuals and firms.</p> <p>CO5: develop the ability to file online returns of income.</p>
Course Code: BCOMPSE301	Course Name: Computer Applications in Business	<p>After completing the course, the student shall be able to: CO1: understand the various concepts and terminologies used in computer networks and internet and be aware of the recent developments in the fast changing digital business world.</p> <p>CO2: handle document creation for communication.</p> <p>CO3: acquire skills to create and make good presentations</p> <p>CO4: make various computations in the area of accounting and finance and represent the business data using suitable charts. S/He should be able to manipulate and analyze the business data for better understanding of the business environment and decision making</p> <p>CO5: understand and apply the various database concepts and tools in the related business areas with the help of suggested popular software.</p>
B.Com Program: 4th Semester		
Course Code: BCOMPC401	Course Name: CORPORATE ACCOUNTING	<p>After completing the course, the student shall be able to:</p> <p>CO1: develop an understanding of accounting for share capital and debentures.</p> <p>CO2: prepare financial statements of a company.</p> <p>CO3: develop an understanding of</p>

		<p>valuation of share.</p> <p>CO4: understand the accounting for amalgamation and liquidation of companies.</p> <p>CO5: prepare consolidated balance sheet for Holding company.</p>
Course Code: BCOMPC402	Course Name: Indirect Tax Laws and Practice	<p>After completing the course, the student shall be able to: CO1: connect with the genesis of goods and services tax (GST), interpret the constitutional amendment carried out to install GST in India and comprehend the composition and working of GST council. CO2: understand the meaning of supply under GST law, differentiate between intra-state and inter-state supply, comprehend rules related to the place of supply and compute the value of supply. CO3: comprehend the utilization of input tax credit, and the reverse charge mechanism of paying GST and to know the procedure for claiming refund under GST law. CO4: understand the provisions for registration under GST along with special provisions such as those related to anti-profiteering; avoidance of dual control; e-way bills and penalties. CO5: know the basic concepts of Customs Act and to compute the assessable value for charging customs duty.</p>
Course Code: BCOMPSE401	Course Name: E-COMMERCE	<p>After completing the course, the student shall be able to: CO1: understand the basics of E-commerce, current and emerging business models. CO2: familiarize with basic business operations such as sales, marketing, HR etc. on the web.</p> <p>CO3: enhance the students' skills for designing and developing website.</p>

		<p>CO4: identify the emerging modes of e-payment.</p> <p>C05: understand the importance of security, privacy, ethical and legal issues of e-commerce.</p>
B.Com Program : 5th Semester		
Course Code: BCOMPACDSE501	Course Name: MANAGEMENT ACCOUNTING	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand thoroughly the conceptual framework of Management Accounting; identification of differences between different forms of accounting— Financial, Cost and Managerial; distinction between cost control and cost reduction.</p> <p>CO2: understand the concept of marginal cost and marginal costing; preparation of income statements using absorption and variable costing; learning of cost-volume-profit analysis and break-even analysis using mathematical and graphical approaches; and the application in businesses.</p> <p>CO3: understand the concept of relevant and irrelevant costs and make decisions related to different business situations using marginal costing and differential costing techniques.</p> <p>CO4: understand budgetary control system as a tool of managerial planning and control; ability to prepare various types of budget. Ability to understand standard costing system as a tool of managerial control; calculation of variances in respect of each element of cost and sales; control ratios.</p>

		CO5: understand management accounting issues of Responsibility accounting, Divisional performance measurement and Transfer pricing.
Course Code: BCOMPACDSE502	Course Name: Advanced Financial Accounting	<p>After completing the course, the student shall be able to:</p> <p>CO1: develop understanding of basic concepts of Branch and departmental accounting and apply the techniques learnt for recording the transactions related to branches and departments of business organisations.</p> <p>CO2: Understand the basic concept and purpose of Investment accounting and Maintain systematic records of Investments made. Students will also learn the process of maintaining accounts for voyages.</p> <p>CO3: understand the concepts and need of having different accounting structure for local bodies and to apply the techniques of accounting in practical field .</p> <p>CO4: understand and analyze the process of ascertaining insurance claims for loss of stock and loss of profit policies.</p> <p>CO5: understand different concepts of accounting for royalties and to apply the accounting process in practical field. Students will also learn the accounting process for sale on approval system.</p>
Course Code: BCOMPACDSE503	Course Name: Cost Accounting	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand thoroughly the conceptual framework of Cost Accounting; identification of</p>

		<p>differences between different financial and cost accounting; cost concepts and elements of cost; preparation of cost sheet.</p> <p>CO2: understand the accounting and control of material and labour cost.</p> <p>CO3: develop ability to understand classification, allocation, apportionment and absorption of overheads in cost determination; under and over absorption of overheads; treatment of various item of overheads</p> <p>CO4: develop ability to calculate the cost of products, jobs, contracts, processes and services after understanding the basic concepts and processes involved in them.</p> <p>CO5: understand cost accounting book keeping systems and reconciliation of cost and financial account profits</p>
Code: BCOMPFIDSE501	Course Name: Financial Market Course	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the meaning and scope of financial markets as well as institutions in India.</p> <p>CO2: understand the concepts of Money Market and Capital Market.</p> <p>CO3: explain Commercial Banking and its Current developments.</p> <p>CO4: explain concept of Non-Banking Financial Companies (NBFC's).</p> <p>CO5: examine the Financial Services Industry.</p>

Course Code: BCOMPFIDSE502	Course Name: Banking and Insurance	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the Concept of Risk, it's types, sources and measurements.</p> <p>CO2: learn the concepts and principles of Insurance and its operations.</p> <p>CO3: develop insights into e-banking and banking sector reform.</p> <p>CO4: examine the Legal aspects of Insurance contract and Actuaries.</p> <p>CO5: familiarize with the Regulatory Framework of Insurance.</p>
Course Code: BCOMPFIDSE503	Course Name: Financial Management	<p>After completing the course, the student shall be able to:</p> <p>CO1: explain the nature and scope of financial management as well as time value of money and risk return trade off.</p> <p>CO2: analyze capital budgeting process and capital budgeting techniques</p> <p>CO3: estimate various capital structure theories and factors affecting capital structure decisions in a firm</p> <p>CO4: critically examine various theories of dividend and factors affecting dividend policy</p> <p>CO5: evaluate working capital requirement</p>
Course Code: BCOMPTXDSE501	Course Name: Tax Planning and Management	<p>After completing the course, the student shall be able to:</p> <p>CO1: Understand basic concepts of</p>

		<p>tax planning, tax management, tax evasion and tax avoidance.</p> <p>CO2: Understand the concepts of tax planning in respect of salary and house property .</p> <p>CO3: understand the concepts of tax planning for a new business with reference to its location and to know about the related provisions for FTZ and SEZ .</p> <p>CO4: understand the concepts of tax planning for a business with reference to its nature and to know about the relevant provisions for companies belonging to different sectors.</p> <p>CO5: understand the concepts of tax planning and available tax concessions with reference to amalgamation, merger and demerger of companies and to know about implication of tax planning for decisions related to make or buy, owning or leasing, repairing and replacement of assets.</p>
Course Code: BCOMPTXDSE502	Course Name: Tax Practice and Procedures	<p>After completing the course, the student shall be able to:</p> <p>CO1.To know about PAN, different ITR forms, filing of returns and assessment procedures.</p> <p>CO2: Understand the concepts of TDS, TCS, tax recovery and settlement process.</p> <p>CO3: understand different aspects of GST returns and related payments, refunds and penalties.</p> <p>CO4: understand the process of tax</p>

		<p>recovery and settlement under GST.</p> <p>CO5: understand the concepts and procedures of customs duty.</p>
<p>Course Code: BCOMPTXDSE503</p>	<p>Course Name: Income Tax Return Filing</p>	<p>Some of the course learning outcomes that learners of this course are required to demonstrate runs thus:</p> <p>CO1: Identify deviant use of income tax portal of government of India</p> <p>CO2: Filing of Income Tax Returns</p> <p>CO3: Recognize their own ability to improve their own competence in the field of Taxation</p> <p>CO4: Understand the process of E-filing of Income Tax Returns</p> <p>CO5: Tax Planning ability</p>
<p>Course Code: BCOMPGE501</p>	<p>Course Name: Principles of Micro Economics</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1: describe the nature and scope of Macro Economics, Income, Expenditure and their components and determinants.</p> <p>CO2: expose fiscal and monetary policy implications through IS-LM framework in short run and long run.</p> <p>CO3: comprehend the different theories of demand for money, supply of money approach and working of money multiplier.</p> <p>CO4: elucidate causes and effects of different types of inflation and trade-off between inflation and unemployment.</p> <p>CO5: describe the role of saving and</p>

		investment in different size of economies on trade and exchange rate and rate of interest.
Course Code: BCOMPSE501	Course Name: Entrepreneurship Development	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the concept of entrepreneurship in the context of Indian economic scenario.</p> <p>CO2: link the individual's capability and strength as a guiding factor towards entrepreneurial orientation.</p> <p>CO3: understand social support system for gaining strength towards entrepreneurial preferences.</p> <p>CO4: understand entrepreneurial process for initiating new venture creation.</p> <p>CO5: understand various dimensions of managing a business enterprise once it is formed.</p>
B.Com Program: 6th Semester		
Course Code: BCOMPACDSE601	Course Name: Advanced Cost Accounting	<p>After completing the course, the student shall be able to:</p> <p>CO1.conceptualize different aspects of marginal costing and its difference with other costing techniques and apply different tools of marginal costing in taking appropriate decisions.</p> <p>CO2: Understand the concepts of standard costing and variance analysis and measure relevant deviations.</p> <p>CO3: understand the concepts and applications of process costing.</p> <p>CO4: understand the concepts of uniform costing, make inter firm</p>

		<p>comparison with relevant tools and understand the concepts of operating costing and its application in selected areas of operation.</p> <p>CO5: understand the concepts and different aspects of cost audit.</p>
<p>Course Code: BCOMPACDSE602</p>	<p>Course Name: Auditing</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1: define auditing, find out the objectives, principles, techniques, advantages and limitations of auditing, classifying auditing, differentiate internal control, internal check, internal audit, vouching and verification</p> <p>CO2: understand various aspects of audit of companies</p> <p>CO3: understand the concept of audit report and certificates</p> <p>CO4: identify the audit process of different institutions</p> <p>CO5: understand the special areas of audit.</p>
<p>Code: BCOMPACDSE603</p>	<p>Course Name: Computerised Accounting Course</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1: know the basics of ERP and its application.</p> <p>CO2: Understand the concepts and applications of computerized inventory management.</p> <p>CO3: understand different aspects of recording day to day transactions in ERP.</p> <p>CO4: understand the process of computerized receivables and payables management.</p>

		CO5: understand the concepts of management information system and its applications in ERP.
Course Code: BCOMPFIDSE601	Course Name: Financial Services	<p>After completing the course, the student shall be able to:</p> <p>CO1: Understand the concepts and applications of various financial service.</p> <p>CO2: comprehend different aspects of pension schemes.</p> <p>CO3: know the various aspects of fund based and fee based financial services.</p> <p>CO4: understand the concepts of financial regulators and their functions in financial market.</p>
Course Code: BCOMPFIDSE602	Course Name: Investment Analysis	<p>After completing the course, the student shall be able to:</p> <p>CO1: explain investment environment and concept of return & risk.</p> <p>CO2: understand bond valuation & role of credit rating agencies.</p> <p>CO3: examine equity approaches.</p> <p>CO4: analyze two securities portfolio using Harry Markowitz model, Calculating portfolio risk and return, explaining CAPM and evaluating Mutual Funds and Financial derivatives.</p> <p>CO5: evaluate investors protection framework</p>
Course Code: BCOMPFIDSE603	Course Name: Capital Market Operation	<p>After completing the course, the student shall be able to:</p> <p>CO1: learn the basics of investing</p>

		<p>in stock market, the investment environment as well as risk & return</p> <p>CO2: analyze different investment strategies</p> <p>CO3: analyze different aspects of investment in bond</p> <p>CO4: learn the process of derivatives trading in India</p> <p>CO5: learn investment process in mutual fund and NPS</p>
<p>Course Code: BCOMPTXDSE601</p>	<p>Course Name: Assessment of Corporate Bodies</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1.understand different aspects of company assessee.</p> <p>CO2: compute taxable income of companies and relevant tax provisions related to it.</p> <p>CO3: know available deductions and set off provisions related to corporate assesses.</p> <p>CO4: know the provisions of capital gains relevant to corporate assesses.</p> <p>CO5: know the provisions of income from other sources and special provisions related to FTZ,SEZ and EOU.</p>
<p>Course Code: BCOMPTXDSE602</p>	<p>Course Name: Tax Authority and Jurisdiction</p>	<p>After completing the course, the student shall be able to:</p> <p>CO1: know about different income tax authorities and their appointment procedures.</p> <p>CO2: understand the jurisdiction of income tax authorities.</p>

		<p>CO3: know about powers of income tax authorities.</p> <p>CO4: understand the process appointment, control and jurisdiction of GST authority.</p> <p>CO5: know the powers of GST authority and understand different aspects of GST audit.</p>
Course Code: BCOMPTXDSE603	Course Name: Goods and Services Tax Return Filing	<p>After completing the course, the student shall be able to:</p> <p>CO1: learn the basics of GST Registration</p> <p>CO2: learn the submission process of Monthly GST Returns</p> <p>CO3: learns the submission process of Outward Supply</p> <p>CO4: learns e-payment of GST CO5: learns generations of E-waybills and annual returns</p>
Course Code: BCOMPGE601	Course Name: Indian Economy	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basic features of Indian Economy</p> <p>CO2: Understand different issues of Indian agricultural sector and food security system prevailing in the country</p> <p>CO3: Address the issues of Industrial development of the country and to gauge the impact of impact of new industrial policy on industrial sector of the country</p> <p>CO4: conceptualize Indian Financial sector and address global issues related to economic development of</p>

		the country CO5: Know about the Process of economic planning and its reforms in the context of Indian economy.
Course Code: BCOMPSE601	Course Name: Personal Selling and Salesmanship	<p>After completing the course, the student shall be able to:</p> <p>CO1: understand the basic of personal selling</p> <p>CO2: Understand different issues of buying motives</p> <p>CO3: Address the issues of Selling process</p> <p>CO4: conceptualize about sales report</p> <p>CO5: Know about the Process of economic planning and its reforms in the context of Indian economy.</p>

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF BOTANY**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BSC HONOURS IN BOTANY
COURSE LEARNING OUTCOMES

Semester – I

Course Name: Phycology and Microbiology

Course Code: BSCHBOTC101

Course Type: Core	Course Details: CC-1			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop understanding on the concept of microbial nutrition
- Classify viruses based on their characteristics and structures
- Develop critical understanding of plant diseases and their remediation.
- Examine the general characteristics of bacteria and their cell reproduction/recombination
- Increase the awareness and appreciation of human friendly viruses, bacteria, algae and their economic importance
- Conduct experiments using skills appropriate to subdivisions

Course Name: Biomolecules and Cell Biology

Course Code: BSCHBOTC102

Course Type: Core	Course Details: CC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop understanding on chemical bonding among molecules
- Identify the concept that explains chemical composition and structure of cell wall

and membrane

- Classify the enzymes and explain mechanism of action and structure
- Compare the structure and function of cells & explain the development of cells
- Describe the relationship between the structure and function of biomolecules

Semester – II

Course name: Mycology And Phytopathology

Course Code: BSCHBOTC201

Course Type: Core	Course Details: CC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to;

- Identify true fungi and demonstrate the principles and application of plant pathology in the control of plant disease.
- Demonstrate skills in laboratory, field and glasshouse work related to mycology and plant pathology.
- Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies
- Identify the common plant diseases according to geographical locations and device control measures

Course name: Archegoniatae: Bryophytes, Pteridophytes, Gymnosperms

Course Code: BSCHBOTC202

Course Type: Core	Course Details: CC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Demonstrate an understanding of archegoniatae, Bryophytes, Pteridophytes and Gymnosperms
- Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms
- Understanding of plant evolution and their transition to land habitat.
- Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, Gymnosperms

Semester – III

Course name: Anatomy of Angiosperms

Course Code: BSCHBOTC301

Course Type: Core	Course Details: CC-5			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop an understanding of concepts and fundamentals of plant anatomy
- Examine the internal anatomy of plant systems and organs
- Develop critical understanding on the evolution of concept of organization of shoot and root apex.
- Analyze the composition of different parts of plants and their relationships
- Evaluate the adaptive and protective systems of plants

Course name: Morphology and Reproductive Biology of Angiosperms

Course Code: BSCHBOTC302

Course Type: Core	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- To know about different plants organ like root, stem and leaves and their importance.
- To learn about various plants parts, embryonic development, breeding activity and conservation techniques.
- Recall the history of reproductive biology of angiosperms & recognize the importance of genetic and molecular aspects of flower development
- Understand structure and functions of anther wall and pollen wall
- Evaluate the special structures of Ovule
- Solve Self-incompatibility in Pollination and fertilization & relate between Embryo, Endosperm and Seed
- Comprehend the causes of Polyembryony and apomixes with its classification
- To learn structure and function of pollen and its role in fertilization, forensic science, melissopalynology.

Course name: Plant Systematics

Course Code: BSCHBOTC303

Course Type: Core	Course Details: CC-7			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Classify Plant systematics and recognize the importance of herbarium and Virtual herbarium
- Evaluate the Important herbaria and botanical gardens
- Interpret the rules of ICN in botanical nomenclature
- Assess terms and concepts related to Phylogenetic Systematics
- Generalize the characters of the families according to Bentham & Hooker's system of classification

Semester – IV

Course name: Plant Ecology and Phytogeography

Course Code: BSCHBOTC401

Course Type: Core	Course Details: CC-8			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Understand core concepts of biotic and abiotic
- Classify the soils on the basis of physical, chemical and biological components
- Analysis the phytogeography or phytogeographical division of India
- Evaluate energy sources of ecological system
- Assess the adaptation of plants in relation to light, temperature, water, wind and fire.
- Conduct experiments using skills appropriate to subdivisions

Course name: Economic Botany and Pharmacognosy

Course Code: BSCHBOTC402

Course Type: Core	Course Details: CC-9			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems
- Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership
- Develop a basic knowledge of taxonomic diversity and important families of useful plants

- Increase the awareness and appreciation of plants & plant products encountered in everyday life.
- Appreciate the diversity of plants and the plant products in human use.
- To know about medicinal properties and uses of plants by folklore and ayurveda system.
- Ability of conserve rare and threatened plant species both in in-vivo and in-vitro conditions.

Course name: Agronomy
Course Code: BSCHBOTC403

Course Type: Core	Course Details: CC-10			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On the completion of the course the students will be able to:

- Understand the concept of agronomy and sustainable agriculture.
- Analyze different aspects diversified agriculture and farm enterprises, production technology of vegetation and flowers.
- Examine the implications integrated farming system along with production economics and farm management
- Evaluate the IT communication and diffusion of agricultural innovation

Semester – V
Course name: Plant Physiology and Metabolism
Course Code: BSCHBOTC501

Course Type: Core	Course Details: CC-11			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to;

- Understand Water relation of plants with respect to various physiological processes.

- Explain chemical properties and deficiency symptoms in plants
- Classify aerobic and anaerobic respiration
- Explain the significance of Photosynthesis and respiration
- Assess dormancy and germination in plants
- Students acquire the adequate knowledge of metabolism in plants.
- Explain the ATP-Synthesis
- To acquire adequate knowledge about translocation in plants, carbon dioxide concentrating mechanisms, growth regulators and flowering of plants.

Course name: Cytology and Genetics

Course Code: BSCHBOTC502

Course Type: Core	Course Details: CC-12			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Have conceptual understanding of laws of inheritance, genetic basis of loci and alleles and their linkage.
- Comprehend the effect of chromosomal abnormalities in numerical as well as structural changes leading to genetic disorders.
- Develop critical understanding of chemical basis of genes and their interactions at population and evolutionary levels.
- Analyze the effect of mutations on gene functions and dosage.
- Examine the structure, function and replication of DNA.

Semester – VI
Course name: Molecular Biology
Course Code: BSCHBOTC601

Course Type: Core	Course Details: CC-13			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to;

- Analyse the structures and chemical properties of DNA and RNA through various historic experiments.
- Differentiate the main types of prokaryotes through their grouping abilities and their characteristic
- Evaluate the experiments establishing central dogma and genetic code.
- Gain an understanding of various steps in transcription, protein synthesis and protein modification.

Course name: Plant Biotechnology and Genetic Engineering Course Code:
BSCHBOTC602

Course Type: Core	Course Details: CC-14			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On the completion of the course the students will be able to

- Understand the core concepts and fundamentals of plant biotechnology and genetic engineering
- Develop their competency on different types of plant tissue culture
- Analyze the enzymes and vectors for genetic manipulations

- Examine gene cloning and evaluate different methods of gene transfer
- Critically analyze the major concerns and applications of transgenic technology
- To learn about gene cloning, recombinant DNA technology and bioinformatics includes recent biotechnological advancement related to genomics and proteomics.
- Acquire the knowledge about gene transfer and applications of biotechnology.
- Acquire the knowledge about tissue culture techniques, restriction digestion, isolation and electrophoresis of plasmid DNA.

Discipline Specific Elective Course

Semester - V

Course Name: Analytical Techniques in Plant Sciences

Course Code: BSCHBOTDSE501

Course Type: Core	Course Details: DSE-501		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

Course Learning Outcomes:

On completion of this course the students will be able to:

- Develop conceptual understanding of cell wall degradation enzymes and cell fractionation.
- Classify different types of chromatography techniques.
- Explain the principles of Light microscopy, compound microscopy, Fluorescence microscopy and confocal microscopy
- Apply suitable strategies in data collections and disseminating research findings.

Course Name: Bioinformatics

Course Code: BSCHBOTDSE502

Course Type: Core	Course Details: DSE-502		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

Course Learning Outcomes:

On completion of this course the students will be able to:

- Understand the concept of databases and use of different public domain for DNA and proteins sequence retrieval.
- Understand the concept of pairwise alignment of DNA sequences using algorithms.
- Explain the structure of proteins homology modeling approach using SWISS MODEL and SWISS-PDB.
- Reflect upon the role of various models in molecular evolution.
- Analyze the role of (QSAR) techniques in Drug Design.

Course Name: Stress Biology

Course Code: BSCHBOTDSE503

Course Type: Core	Course Details: DSE-503			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, students will be able to:

- Develop the understanding of concept of stress, stress factors and resistance mechanisms.
- Explain different types of stress with examples.
- Develop the ability for critical appraisal of various physiological mechanisms that protect the plant from environmental stress i.e. adaptation, avoidance and tolerance.
- Analyze the role of production and scavenging mechanisms

Course Name: Plant Breeding

Course Code: BSCHBOTDSE504

Course Type: Core	Course Details: DSE-504			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course students will be able to:

- Develop conceptual understanding of plant genetic resources, plant breeding, gene bank and gene pool.
- Familiarize with genetic basis of heterosis.
- Classify Sexual and Asexual modes of reproduction.
- Explain monogenic and polygenic inheritance
- Reflect upon the role of various non- conventional methods used in crop improvement.

Semester - VI

Course Name: Research Methodology

Course Code: BSCHBOTDSE601

Course Type: Core	Course Details: DSE-601			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

At the end of the course the students will be able to,

- Understand the concept of research and different types of research in the context of biology
- Develop laboratory experiment related skills.
- Develop competence on data collection and process of scientific documentation
- Analyze the ethical aspects of research
- Evaluate the different methods of scientific writing and reporting

Course Name: Biostatistics

Course Code: BSCHBOTDSE602

Course Type: Core	Course Details: DSE-602			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

At the end of the course the students will be able to,

- Comprehend the fundamental concepts related to descriptive and inferential biostatistics.
- Develop skills in data tabulation, its treatment, analysis, interpretation and graphical representation of data.
- Analyze the implications of inferential statistics in biology.
- Develop their competence in hypothesis testing and interpretation.

Course Name: Natural Resource Management**Course Code: BSCHBOTDSE603**

Course Type: Core	Course Details: DSE-603			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

At the end of the course the students will be able to,

- Understand the concept of different natural resources and their utilization.
- Critically analyze the sustainable utilization land, water, forest and energy resources.
- Evaluate the management strategies of different natural resources.
- Reflect upon the different national and international efforts in resource management and their conservation

Course Name: Horticultural Practices and Post-harvest Technology**Course Code: BSCHBOTDSE604**

Course Type: Core	Course Details: DSE-604			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

At the end of the course the students will be able to,

- Understand the concept of different types of horticultural practices for value addition
- Visualize the post-harvest problems likely to be confronted
- Know the tricks of the trade and how to increase the longevity of the produce

SEC- Skill Enhancement Course -**Semester - III****Course name: Biofertilizers****Course code – BSCHBOTSEC301**

Course Type: Core	Course Details: SEC-301			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On the completion of this course, the students will be able to;

- Develop their understanding on the concept of bio-fertilizer
- Identify the different forms of biofertilizers and their uses
- Compose the Green manuring and organic fertilizers
- Develop the integrated management for better crop production by using both nitrogenous and phosphate bio fertilizers and vesicular arbuscular mycorrhizal (VAM).
- Interpret and explain the components, patterns, and processes of bacteria for growth in crop production

Course name: Ethnobotany**Course code – BSCHBOTSEC302**

Course Type: Core	Course Details: SEC-302			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Conceptualize ethnobotany as an interdisciplinary science
- Restate the established methodology of ethnobotany studies
- Categories various indigenous ethnic groups and their environmental practices.
- Understand the legalities associated with ethnobotany.

Semester - IV

Course name: Plant Diversity and Human welfare

Course code – BSCHBOTSEC401

Course Type: Core	Course Details: SEC-401			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop understanding of the concept and scope of plant biodiversity
- Identify the causes and implications of loss of biodiversity
- Apply skills to manage plant biodiversity
- Utilize various strategies for the conservation of biodiversity
- Conceptualize the role of plants in human welfare with special reference to India

Course name: Mushroom culture technology

Course code – BSCHBOTSEC402

Course Type: Core	Course Details: SEC-402			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Recall various types and categories of mushrooms.
- Demonstrate various types of mushroom cultivating technologies.

- Examine various types of food technologies associated with mushroom industry.
- Value the economic factors associated with mushroom cultivation
- Device new methods and strategies to contribute to mushroom production.

BSC PROGRAM IN BOTANY

COURSE LEARNING OUTCOMES

Semester – I

Course Name: Phycology and Microbiology

Course Code: BSCPBOC101

Course Type: Core	Course Details: CC-1			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop understanding on the concept of microbial nutrition
- Classify viruses based on their characteristics and structures
- Develop critical understanding of plant diseases and their remediation.
- Examine the general characteristics of bacteria and their cell reproduction/recombination
- Increase the awareness and appreciation of human friendly viruses, bacteria, algae and their economic importance
- Conduct experiments using skills appropriate to subdivisions

Semester – II

Course name: Mycology And Phytopathology

Course Code: BSCPBOC201

Course Type: Core	Course Details: CC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to;

- Identify true fungi and demonstrate the principles and application of plant pathology in the control of plant disease.
- Demonstrate skills in laboratory, field and glasshouse work related to mycology and plant pathology.
- Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies
- Identify the common plant diseases according to geographical locations and device control measures

Semester-III

Course name: Archegoniatae: Bryophytes, Pteridophytes, Gymnosperms

Course Code: BSCPBOC301

Course Type: Core	Course Details: CC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Demonstrate an understanding of archegoniatae, Bryophytes, Pteridophytes and Gymnosperms
- Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms
- Understanding of plant evolution and their transition to land habitat.
- Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, Gymnosperms

Semester-IV

Course name: Plant Systematics

Course Code: BSCPBOC401

Course Type: Core	Course Details: CC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Classify Plant systematics and recognize the importance of herbarium and Virtual herbarium
- Evaluate the Important herbaria and botanical gardens
- Interpret the rules of ICN in botanical nomenclature
- Assess terms and concepts related to Phylogenetic Systematics
- Generalize the characters of the families according to Bentham & Hooker's system of classification

Semester – V

Course name: Anatomy of Angiosperms

Course Code: BSCPBOC501

Course Type: Core	Course Details: CC-5			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Develop an understanding of concepts and fundamentals of plant anatomy
- Examine the internal anatomy of plant systems and organs
- Develop critical understanding on the evolution of concept of organization of shoot and root apex.
- Analyze the composition of different parts of plants and their relationships

- Evaluate the adaptive and protective systems of plants

Course name: Plant Physiology

Course Code: BSCPBO TC502

Course Type: Core	Course Details: CC-5			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to;

- Understand Water relation of plants with respect to various physiological processes.
- Explain chemical properties and deficiency symptoms in plants
- Classify aerobic and anaerobic respiration
- Explain the significance of Photosynthesis and respiration
- Assess dormancy and germination in plants
- To acquire adequate knowledge about translocation in plants, carbon dioxide concentrating mechanisms, growth regulators and flowering of plants.

Semester – VI

Course name: Cytogenetics

Course Code: BSCPBO TC601

Course Type: Core	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Have conceptual understanding of laws of inheritance, genetic basis of loci and alleles and their linkage.
- Comprehend the effect of chromosomal abnormalities in numerical as well as

structural changes leading to genetic disorders.

- Develop critical understanding of chemical basis of genes and their interactions at population and evolutionary levels.
- Analyze the effect of mutations on gene functions and dosage.
- Examine the structure, function and replication of DNA.

Course name: Plant Ecology and Phytogeography

Course Code: BSCPBOC602

Course Type: Core	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Understand core concepts of biotic and abiotic
- Classify the soils on the basis of physical, chemical and biological components
- Analysis the phytogeography or phytogeographical division of India
- Evaluate energy sources of ecological system
- Assess the adaptation of plants in relation to light, temperature, water, wind and fire.
- Conduct experiments using skills appropriate to subdivisions

SEC- Skill Enhancement Course – For Program/Pass Course

Semester - III

Course code – BSCPBOCSEC301

Course name: Ethnobotany

Course Type: SEC	Course Details: SEC-301			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Conceptualize ethnobotany as an interdisciplinary science
- Restate the established methodology of ethnobotany studies
- Categories various indigenous ethnic groups and their environmental practices.
- Understand the legalities associated with ethnobotany.

Course Code BSCPOTSEC302**Course name – Nursery and Gardening**

Course Type: SEC	Course Details: SEC-302			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course the students will be able to;

- Understand the process of sowing seeds in nursery
- List the various resources required for the development of nursery
- Distinguish among the different forms of sowing and growing plants
- Analyse the process of Vegetative propagation
- Appreciate the diversity of plants and selection of gardening
- Examine the cultivation of different vegetables and growth of plants in nursery and Gardening

Semester - IV**Course code – BSCHBOTSEC401****Course name: Biofertilizers**

Course Type: SEC	Course Details: SEC-401			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On the completion of this course, the students will be able to;

- Develop their understanding on the concept of bio-fertilizer
- Identify the different forms of biofertilizers and their uses
- Compose the Green manuring and organic fertilizers
- Develop the integrated management for better crop production by using both nitrogenous and phosphate bio fertilizers and vesicular arbuscular mycorrhizal (VAM).
- Interpret and explain the components, patterns, and processes of bacteria for growth in crop production

Course code – BSCHBOTSEC402

Course name – Biostatistics

Course Type: SEC	Course Details: SEC-402			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

At the end of the course the students will be able to,

- Comprehend the fundamental concepts related to descriptive and inferential biostatistics.
- Develop skills in data tabulation, its treatment, analysis, interpretation and graphical representation of data.
- Analyze the implications of inferential statistics in biology.
- Develop their competence in hypothesis testing and interpretation.

Semester - V

Course code – BSCHBOTSEC501

Course name: Plant Diversity and Human welfare

Course Type: SEC	Course Details: SEC-501			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

After the completion of this course, the learner will be able to:

- Develop understanding of the concept and scope of plant biodiversity
- Identify the causes and implications of loss of biodiversity
- Apply skills to manage plant biodiversity
- Utilize various strategies for the conservation of biodiversity
- Conceptualize the role of plants in human welfare with special reference to India

Course code – BSCHBOTSEC502

Course name: Mushroom culture technology

Course Type: SEC	Course Details: SEC-502			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

On completion of this course, the students will be able to:

- Recall various types and categories of mushrooms.
- Demonstrate various types of mushroom cultivating technologies.
- Examine various types of food technologies associated with mushroom industry.
- Value the economic factors associated with mushroom cultivation
- Device new methods and strategies to contribute to mushroom production.

Semester – VI

Course Code - BSCPBOTSEC601

Course Name: Floriculture

Course Type: SEC	Course Details: SEC-601			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

After completing this course the learner will be able to;

- ☐ Develop conceptual understanding of gardening from historical perspective
- ☐ Analyze various nursery management practices with routine garden operations.
- ☐ Distinguish among the various Ornamental Plants and their cultivation
- ☐ Evaluate garden designs of different countries
- ☐ Appraise the landscaping of public and commercial places for floriculture.
- ☐ Diagnoses the various diseases and uses of pests for ornamental plants.

Course Code - BSCPBOTSEC602

Course Name: Fermentation Technology

Course Type: SEC	Course Details: SEC-602			L-T-P: 4-0-0	
Credit: 4	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		-	10	-	40

Course Learning Outcomes:

After completing this course the learner will be able to;

- ☐ Employ the process for maintenance and preservation of microorganisms
- ☐ Analyze the various aspects of the fermentation technology and apply for Fermentative production
- ☐ Demonstrate proficiency in the experimental techniques for microbial production of enzymes: amylase and protease, bio product recover

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF CHEMISTRY

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

B.Sc. (Honours) in Chemistry

SEMESTER-I

Course Name: Inorganic Chemistry-I

Course Code: BSCHCEMC101

Course Type: Core (Theoretical)	Course Details: CC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Atomic theory and its evolution.
2. Learning scientific theory of atoms, concept of wave function.
3. Elements in periodic table; physical and chemical characteristics, periodicity.
4. To predict the atomic structure, chemical bonding, and molecular geometry based on accepted models.
5. To understand atomic theory of matter, composition of atom.
6. Identity of given element, relative size, charges of proton, neutron and electrons, and their assembly to form different atoms.
7. Defining isotopes, isobar and isotone.
8. Physical and chemical characteristics of elements in various groups and periods according to ionic size, charge, etc. and position in periodic table.
9. Characterize bonding between atoms, molecules, interaction and energetics (ii) hybridization and shapes of atomic, molecular orbitals, bond parameters, bond- distances and energies.
10. Valence bond theory incorporating concepts of hybridization predicting geometry of molecules. 11. Importance of hydrogen bonding, metallic bonding.

Course Name: Organic Chemistry-I

Course Code: BSCHCEMC102

Course Type: Core (Theoretical)		Course Details: CC-2		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Basic of organic molecules, structure, bonding, reactivity and reaction mechanisms.
2. Stereochemistry of organic molecules – conformation and configuration, asymmetric molecules and nomenclature.
3. Aromatic compounds and aromaticity, mechanism of aromatic reactions.
4. Understanding hybridization and geometry of atoms, 3-D structure of organic molecules, identifying chiral centers.

5. *Reactivity, stability of organic molecules, structure, stereochemistry.*
6. *Electrophile, nucleophiles, free radicals, electronegativity, resonance, and intermediates along the reaction pathways.*
7. *Mechanism of organic reactions (effect of nucleophile/leaving group, solvent), substitution vs. elimination.*

Course Code: BSCHCEMGE101

Course Type: Core (Theoretical)	Course Details: GEC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. *Atomic theory and its evolution.*
2. *Learning scientific theory of atoms, concept of wave function.*
3. *Elements in periodic table; physical and chemical characteristics, periodicity.*
4. *To predict the atomic structure, chemical bonding, and molecular geometry based on accepted models.*
5. *To understand atomic theory of matter, composition of atom.*
6. *Identity of given element, relative size, charges of proton, neutron and electrons, and their assembly to form different atoms.*
7. *Defining isotopes, isobar and isotone.*
8. *Physical and chemical characteristics of elements in various groups and periods according to ionic size, charge, etc. and position in periodic table.*
9. *Basic of organic molecules, structure, bonding, reactivity and reaction mechanisms.*
10. *Reactivity, stability of organic molecules, structure, stereochemistry.*
11. *Electrophile, nucleophiles, free radicals, electronegativity, resonance, and intermediates along the reaction pathways.*
12. *Mechanism of organic reactions (effect of nucleophile/leaving group, solvent), substitution vs. elimination.*

SEMESTER – II

Course Name: Physical Chemistry – I

Course Code:BSCHCEMC201

Course Type: CORE	Course Details: CC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Familiarization with various states of matter.
2. Physical properties of each state of matter and laws related to describe the states.
3. Calculation of lattice parameters.
4. Electrolytes and electrolytic dissociation, salt hydrolysis and acid-base equilibria.
5. Understanding Kinetic model of gas and its properties.
6. Maxwell distribution, mean-free path, kinetic energies.
7. Behavior of real gases, its deviation from ideal behavior, equation of state, isotherm, and law of corresponding states.
8. Liquid state and its physical properties related to temperature and pressure variation.
9. Properties of liquid as solvent for various household and commercial use.
10. Solids, lattice parameters – its calculation, application of symmetry, solid characteristics of simple salts.
11. Ionic equilibria – electrolyte, ionization, dissociation.
12. Salt hydrolysis (acid-base hydrolysis) and its application in chemistry

Course Name: Organic Chemistry-II

Course Code:BSCHCEMC202

Course Type: CORE	Course Details: CC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

After completion of the course, the learner shall be able to understand:

Learning Outcomes:

1. Familiarization about classes of organic compounds and their methods of preparation.
2. Basic uses of reaction mechanisms.
3. Name reactions, uses of various reagents and the mechanism of their action.
4. Preparation and uses of various classes of organic compounds.
5. Organometallic compounds and their uses.

6. Organic chemistry reactions and reaction mechanisms.
7. Use of reagents in various organic transformation reactions.

Course Name: Elementary Physical Chemistry & Organic Chemistry

Course Code: BSCHCEMGE201

Course Type: GE	Course Details: GEC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Understanding Kinetic model of gas and its properties.
2. Maxwell distribution, mean-free path, kinetic energies.
3. Behavior of real gases, its deviation from ideal behavior, equation of state, isotherm, and law of corresponding states.
4. Laws of thermodynamics and concepts.
5. Partial molar quantities and its attributes.
6. Dilute solution and its properties.
7. Understanding the concept of system, variables, heat, work, and laws of thermodynamics.
8. Understanding the concept of heat of reactions and use of equations in calculations of bond energy, enthalpy, etc.
9. Understanding the concept of entropy; reversible, irreversible processes.
10. Understanding the application of thermodynamics: Joule Thomson effects
11. Stereochemistry of organic molecules – conformation and configuration, asymmetric molecules and nomenclature.
12. Aromatic compounds and aromaticity, mechanism of aromatic reactions.
13. Understanding 3-D structure of organic molecules, identifying chiral centers.

SEMESTER – III

Course Name: Inorganic Chemistry – II

Course Code: BSCHCEMC301

Course Type: CORE	Course Details: CC-5			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Understanding coordination compounds – its nomenclature, and various types of ligands
2. Concept of Valence Bond Theory and its applications and drawbacks
3. Different types of isomerism (both geometrical and optical) in coordination chemistry
4. Understanding chelate effect, macrocyclic effect and their relation with the stability of the complex
5. Application of coordination complexes
6. Various concepts of acids and bases
7. Different factors favouring acid-base strength
8. Understanding HSAB concepts and relate to application in chemistry
9. Concepts of other non-aqueous solvents
10. Chemistry, reactivity and various properties of s- and p-block elements
11. Hands on experience on the identifications of various acid and basic radicals and qualitative estimation of radicals from a mixture of salts

Course Name: Organic Chemistry – III

Course Code: BSCHCEMC302

Course Type: CORE	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Will have knowledge about Nitrogen containing functional groups and their reactions in various aspects
2. Familiarization with polynuclear hydrocarbons and their reactions
3. Heterocyclic compounds and their reactions
4. Understanding reactions and reaction mechanism of nitrogen containing functional groups
5. Understanding the reactions and mechanisms of diazonium compounds
6. Understanding the structure and their mechanism of reactions of selected polynuclear hydrocarbons
7. Understanding the structure, mechanism of reactions of selected heterocyclic compounds
8. Name reactions, uses of various reagents and the mechanism of their action
9. Various organometallic chemistry in organic transformations
10. Hands on experience of various organic molecule identifications

Course Name: Physical Chemistry – II**Course Code: BSCHCEMC303**

Course Type: CORE	Course Details: CC-7			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. *First Law of thermodynamics and concepts.*
2. *Understand the concept of system, variables, heat, work, and their relations.*
3. *Concept of heat of reactions and use of equations in calculations of bond energy, enthalpy, etc.*
4. *Understand the basics of chemical kinetics: determination of order, molecularity, theories of reaction rates, determination of rate of opposing/parallel/chain reactions with suitable examples, application of steady state kinetics, Steady-state approximation.*
5. *Basic principle of laws of electrochemistry.*
6. *Concept of ion atmosphere.*
7. *Application of conductance measurement.*
8. *Adsorption – theory and significance.*
9. *Langmuir, Freundlich – adsorption isotherms, significance.*
10. *Understand the colloids and different types of electrokinetic phenomena, concept of micelles.*
11. *Concepts of electrical properties of molecules and different types of intermolecular forces.*
12. *Practical experience on kinetics and solubility product related experiments*

Course Name: Physical Chemistry & Inorganic Chemistry**Course Code: BSCHCEMGE301**

Course Type: GE	Course Details: GEC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. *Basic concept of phase rule in a binary liquid mixture*
2. *Basic knowledge about colligative properties of solutions*
3. *Introduction on electrochemistry, electrochemical cell formation, electrode potentials*
4. *Concepts about conductance, transport number, limiting law*
5. *1st and 2nd order kinetics of chemicals reaction*
6. *Information about catalysis and catalyst*
7. *Some idea about acid-base chemistry*

8. *Concepts of ionic equilibria*

Course Name: Industrial Chemistry
Course Code: BSCHCEMSE301

Course Type: SEC (Theoretical)	Course Details: SEC-1		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		.....	10	..... 40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. *Understanding to the chemistry of paints, varnishes and dyes*
2. *Preparation and uses of various compounds including KMnO_4 , CaC_2 , alloy steels etc.*
3. *Understanding the chemistry of ceramics*
4. *Concepts of corrosion: cause and prevention*
5. *Various fire-extinguishers and their chemical contents*

Course Name: Pharmaceutical Chemistry
Course Code: BSCHCEMSE302

Course Type: SEC (Theoretical)	Course Details: SEC-1		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		.....	10	..... 40

On completion of this course, the students will be able to understand:

Learning objectives:

1. *Understanding of different drug design and discoveries*
2. *Different classes of drugs and their examples*
3. *Some knowledge about aerobic and anaerobic fermentation chemistry*
4. *Some idea about production of various drug related components*

SEMESTER – IV

Course Name: Inorganic Chemistry – III
Course Code: BSCHCEMC401

Course Type: CORE	Course Details: CC-8		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Coordination compounds – Crystal field theory, and some preliminary idea about Ligand Field Theory
2. Concept of Jahn-Teller Distortion and application to the Z-in and Z-out chemistry
3. Explanation about the origin of colour of complexes
4. Concepts of magnetic properties of the complexes
5. d- block chemistry including 1st, 2nd and 3rd row transition elements on their various oxidations state, magnetic properties, complex formation etc.
6. f-block chemistry including both lanthanides and actinides.
7. Concepts of Lanthanide contraction, abnormal electronic configuration and magnetic properties and their chemistry
8. Introductory idea about inorganic reaction mechanism, labile-inert complex, reaction mechanism on various substitution reaction, trans-/cis-effect and its consequences etc.
9. Hands on experience on the preparations of some inorganic complexes

Course Name: Organic Chemistry – IV

Course Code: BSCHCEMC402

Course Type: CORE	Course Details: CC-9			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Alkaloids and Terpenes
2. Classification, structure, mechanism of reactions of few selected alkaloids and terpenes
3. Understanding principle of UV-Vis spectroscopy, IR Spectroscopy, NMR spectroscopy, Mass spectrometry and their applications.
4. Various pericyclic reactions
5. Carbohydrate chemistry mostly monosaccharides and few examples of disaccharides and polysaccharides

Course Name: Physical Chemistry – III

Course Code: BSCHCEMC403

Course Type: CORE	Course Details: CC-10			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Second Law of thermodynamics and concepts.
2. Understand the concept of entropy; reversible, irreversible processes.
3. Learn the application of thermodynamics: Joule Thompson effects, partial molar quantities.
4. Understanding about electrodes, EMF measurement, chemical cells and their function.
5. Learn the working of electrochemical cells, galvanic cell.
6. Qualitative idea about potentiometric titrations and their applications.
7. Understand the collision theory and transition state theory for any reaction.
8. Concepts of phases, components, degrees of freedom, Gibb's phase rule and its applications, construction of phase diagram of different systems, the application of phase diagram.
9. Understand phase equilibrium, criteria, CST, Duhem-Margules equation.
10. Concepts of four colligative properties, their interrelations and applications.

Course Name: Inorganic Chemistry & Organic Chemistry
Course Code: BSCHCEMGE401

Course Type: GE	Course Details: GEC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Characterize bonding between atoms, molecules, interaction and energetics
2. Hybridization and shapes of atomic, molecular orbitals, bond parameters, bond- distances.
3. Concepts of acids and bases
4. Electrolytes and electrolytic dissociation, salt hydrolysis
5. Salt hydrolysis (acid-base hydrolysis) and its application in chemistry.
6. Understanding redox reactions
7. Understanding the preparation methods of few organic compounds

Course Name: Mathematics and Statistics for Chemists
Course Code: BSCHCEMSE401

Course Type: SEC(Theoretical)		Course Details: SEC-2		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Understand different mathematical functions.
2. Learn about mathematical probability and correlations.
3. Concepts of sampling and analysis of data.

Course Name: Fuel Chemistry
Course Code: BSCHCEMSE402

Course Type: SEC (Theoretical)	Course Details: SEC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Concepts of different renewable and non-renewable energy sources
2. Understanding the Coal as a fuel
3. Fractionation of coal tar and coal liquification
4. Other non-petroleum fuels and their production and uses
5. Understanding of various petrochemicals and their uses

SEMESTER – V

Course Name:Organic Chemistry – V

Course Code: BSCHCEMC501

Course Type: Core	Course Details: CC-11			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Understandings of different types of biomolecules, e.g, amino acids. proteins, nucleic acids etc, synthesis and properties of these biomolecules.
2. Knowledge of structure of DNA
3. Concepts of reactions and mechanism of metabolism in human body system
4. Information and use of some pharmaceutical compounds
5. Knowledge of different types of organic synthesis

Course Name:Inorganic Chemistry – IV

Course Code:BSCHCEMC502

Course Type: Core	Course Details: CC-12			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Concepts of redox potentials and redox titrations.
2. Understandings of radioactivity and stability of any nucleus.
3. Knowledge of radio carbon dating.
4. Concepts of organometallic compounds, their preparations nomenclature and properties.

Course Name:Green Chemistry

Course Code: BSCHCEMDSE501

Course Type: DSE	Course Details: DSEC-1 or 2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. To inspire the students about the chemistry which is good for human health and environment.
2. To make students aware of how chemical processes can be designed, developed and run in a sustainable way.
3. To acquire the knowledge of the twelve principles of green chemistry and how to apply in green synthesis.
4. To make students aware about the benefits of using green chemistry.

Course Name:Environmental Chemistry

Course Code: BSCHCEMDSE502

Course Type: DSE	Course Details: DSEC-1 or 2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Concepts of different sphere and layers of earth's atmosphere.
2. To make students aware of different toxic chemicals and how they spoil the environment.
3. Knowledge of toxicity of different chemicals and impact on environment.

Course Name:Solid State Chemistry

Course Code: BSCHCEMDSE503

Course Type: DSE	Course Details: DSEC-1 or 2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		---	10	----	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Basic knowledge of structure of solids and crystal structure
2. Concepts of laws of crystallography and designation of crystal planes
3. Knowledge of different types of bonding in crystals.
4. Concepts of superconductor, semiconductors, transistors etc

SEMESTER – VI

Course Name: Inorganic Chemistry – V

Course Code: BSCHCEMC601

Course Type: Core	Course Details: CC-13			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Students acquire knowledge of role of metal ions in our biological systems and mechanisms of action of drugs in our body system.
2. Basic knowledge of analytical chemistry
3. Concept of extraction and purification process of compounds
4. Knowledge of different chromatography techniques
5. Knowledge of Polymer chemistry

Course Name: Physical Chemistry – IV

Course Code: BSCHCEMC602

Course Type: Core	Course Details: CC-14			L-T-P: 4-0-2	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Understand the equilibrium on the basis of thermodynamic parameters.
2. Understand the Le Chatelier's principle from thermodynamics.
3. Concepts of thermodynamic probability and relation with entropy.
4. Calculation of entropy using 3rd law of thermodynamics.
5. Concepts of partition functions.
6. Understanding the symmetry and group theory.

7. Learn about limitations of classical mechanics and solution in terms of quantum mechanics for atomic/molecular systems.
8. Develop an understanding of quantum mechanical operators, quantization, probability distribution, uncertainty principle.
9. Knowledge of the laws of absorption of light energy by molecules and the subsequent photochemical reactions.
10. Interpret rotational and vibrational spectra and know about their application.

Course Name: Chemistry of Nanomaterials

Course Code: BSCHCEMDSE601

Course Type: DSE	Course Details: DSEC-3 or 4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Basic concepts of nanomaterials and their activity.
2. Knowledge of synthesis of nanomaterials
3. Concepts of some special types of nanomaterials
4. Characterisations of nanomaterials by using different instrumental techniques

Course Name: Dynamic Stereochemistry

Course Code: BSCHCEMDSE602

Course Type: DSE	Course Details: DSEC-3 or 4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning Outcomes:

1. Knowledge of stereoselective and stereospecific reactions
2. Concepts of stereochemical aspects of some organic reactions
3. Knowledge of conformation and reactivity for alicyclic compounds
4. Knowledge of stereochemical change of substitution, elimination and NGP reactions

Course Name: Quantum Chemistry & Spectroscopy**Course Code: BSCHCEMDSE603**

Course Type: DSE	Course Details: DSEC-3 or 4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

- 1. Learn about limitations of classical mechanics and solution in terms of quantum mechanics for atomic/molecular systems.*
- 2. Develop an understanding of quantum mechanical operators, quantization, probability distribution, uncertainty principle.*
- 3. Knowledge of spectral lines of atoms in the light of quantum mechanics.*
- 4. Some basic concepts of different types of molecular spectra such as vibrational, rotational, Raman, NMR, Mossbauer.*

B.Sc. (Program) in Chemistry

Learning Outcome Based Curriculum Framework

SEMESTER-I

Course Name: Basics in Organic and Inorganic Chemistry

Course Code: BSCPCEMC101

Course Type: Core (Theoretical)	Course Details: CC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. Atomic theory and its evolution.
2. Learning scientific theory of atoms, concept of wave function.
3. Elements in periodic table; physical and chemical characteristics, periodicity.
4. To predict the atomic structure, chemical bonding, and molecular geometry based on accepted models.
5. To understand atomic theory of matter, composition of atom.
6. Identity of given element, relative size, charges of proton, neutron and electrons, and their assembly to form different atoms.
7. Defining isotopes, isobar and isotone.
8. Physical and chemical characteristics of elements in various groups and periods according to ionic size, charge, etc. and position in periodic table.
9. Basic of organic molecules, structure, bonding, reactivity and reaction mechanisms.
10. Reactivity, stability of organic molecules, structure, stereochemistry.
11. Electrophile, nucleophiles, free radicals, electronegativity, resonance, and intermediates along the reaction pathways.
12. Mechanism of organic reactions (effect of nucleophile/leaving group, solvent), substitution vs. elimination.

SEMESTER – II

Course Name: Elementary Physical Chemistry & Organic Chemistry

Course Code: BSCPCEMC201

Course Type: CORE	Course Details: CC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. *Understanding Kinetic model of gas and its properties.*
2. *Maxwell distribution, mean-free path, kinetic energies.*
3. *Behavior of real gases, its deviation from ideal behavior, equation of state, isotherm, and law of corresponding states.*
4. *Laws of thermodynamics and concepts.*
5. *Partial molar quantities and its attributes.*
6. *Dilute solution and its properties.*
7. *Understanding the concept of system, variables, heat, work, and laws of thermodynamics.*
8. *Understanding the concept of heat of reactions and use of equations in calculations of bond energy, enthalpy, etc.*
9. *Understanding the concept of entropy; reversible, irreversible processes.*
10. *Understanding the application of thermodynamics: Joule Thomson effects*
11. *Stereochemistry of organic molecules – conformation and configuration, asymmetric molecules and nomenclature.*
12. *Aromatic compounds and aromaticity, mechanism of aromatic reactions.*
13. *Understanding 3-D structure of organic molecules, identifying chiral centers.*

SEMESTER – III

Course Name: Physical Chemistry & Inorganic Chemistry

Course Code: BSCPCEMC301

Course Type: CORE	Course Details: CC-1(3)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. *Basic concept of phase rule in a binary liquid mixture*
2. *Basic knowledge about colligative properties of solutions*
3. *Introduction on electrochemistry, electrochemical cell formation, electrode potentials*
4. *Concepts about conductance, transport number, limiting law*
5. *1st and 2nd order kinetics of chemicals reaction*
6. *Information about catalysis and catalyst*
7. *Some idea about acid-base chemistry*
8. *Concepts of ionic equilibria*

Course Name: Industrial Chemistry
Course Code: BSCPCEMSE301

Course Type: SEC (Theoretical)	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning outcomes:

1. *Understanding to the chemistry of paints, varnishes and dyes*
2. *Preparation and uses of various compounds including KMnO₄, CaC₂, alloy steels etc.*
3. *Understanding the chemistry of ceramics*
4. *Concepts of corrosion: cause and prevention*
5. *Various fire-extinguishers and their chemical contents*

SEMESTER – IV

Course Name: Inorganic Chemistry & Organic Chemistry
Course Code: BSCPCEMC401

Course Type: CORE	Course Details: CC-1(4)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. *Characterize bonding between atoms, molecules, interaction and energetics*
2. *Hybridization and shapes of atomic, molecular orbitals, bond parameters, bond- distances.*
3. *Concepts of acids and bases*
4. *Electrolytes and electrolytic dissociation, salt hydrolysis*

5. Salt hydrolysis (acid-base hydrolysis) and its application in chemistry.
6. Understanding redox reactions
7. Understanding the preparation methods of few organic compounds

Course Name: Chemistry of Cosmetics & Perfumes

Course Code: BSCPCEMSE401

Course Type: SEC	Course Details: SEC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Basic concepts of cosmetics and perfumes
2. Some examples of cosmetics and perfumes
3. Knowledge of preparation of these compounds

SEMESTER – V

Course Name: Applied Chemistry

Course Code: BSCPCEMDSE501

Course Type: DSE	Course Details: DSEC-1(1) or 2(1) or 3(1)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Basic concepts of analytical chemistry and its application.
2. To inspire the students about the chemistry which is good for human health and environment.
3. To acquire the knowledge of the twelve principles of green chemistry and how to apply in green synthesis.
4. To make students aware about the benefits of using green chemistry.
5. Knowledge of Colloids and Macromolecular chemistry

Course Name: Quantum Chemistry, Spectroscopy & Photochemistry**Course Code: BSCPCEMDSE502**

Course Type: DSE	Course Details: DSEC-1(1) or 2(1) or 3(1)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		----	10	---- 40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Learn about limitations of classical mechanics and solution in terms of quantum mechanics for atomic/molecular systems.
2. Develop an understanding of quantum mechanical operators, quantization, probability distribution, uncertainty principle.
3. Knowledge of spectral lines of atoms in the light of quantum mechanics.
4. Some basic concepts of different types of molecular spectra such as vibrational, rotational, NMR.

Course Name: Pharmaceutical Chemistry**Course Code: BSCPCEMSE501**

Course Type: SEC	Course Details: SEC-3		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		----	10	---- 40

On completion of this course, the students will be able to understand:

Learning objectives:

5. Understanding of different drug design and discoveries
6. Different classes of drugs and their examples
7. Some knowledge about aerobic and anaerobic fermentation chemistry
8. Some idea about production of various drug related components

SEMESTER – VI**Course Name: Chemistry of Biomolecules & Chemotherapy****Course Code: BSCPCEMDSE601**

Course Type: DSE	Course Details: DSEC-1(2) or 2(2) or 3(2)		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		----	10	---- 40

On completion of this course, the students will be able to understand:

Learning objectives:

6. Understandings of different types of biomolecules, e.g, amino acids. proteins, etc, synthesis and properties of these molecules.
7. Activity of enzymes in biological systems
8. Basic concepts of chemotherapy
9. Knowledge of synthesis of different drug molecules

Course Name: Advanced Inorganic Chemistry

Course Code: BSCPCEMDSE602

Course Type: DSE	Course Details: DSEC-1(2) or 2(2) or 3(2)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		----	10	----	40

On completion of this course, the students will be able to understand:

Learning objectives:

10. Coordination compounds – Concepts of double salts and complex salts, Werner theory
11. Knowledge of main group elements, electronic configurations, their properties abundance in nature reactions etc.
12. d- block/transition elements , some compounds, their preparations properties etc.

Course Name: Fuel Chemistry

Course Code: BSCPCEMSE601

Course Type: SEC (Theoretical)		Course Details: SEC-4		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

On completion of this course, the students will be able to understand:

Learning objectives:

1. Concepts of different renewable and non-renewable energy sources
2. Understanding the Coal as a fuel
3. Fractionation of coal tar and coal liquification
4. Other non-petroleum fuels and their production and uses
5. Understanding of various petrochemicals and their uses
6. Concepts of lubricants and their various properties

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF ECONOMICS

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BSc Honours in Economics

Semester- I

Course Name: Microeconomic Theory - I

Course Code: BSCHECOC101

Course Type: Core (Theory)	Course Details:CC-1			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

- 1. To make the learners understand the concept of economics, the distinction between micro economics and macroeconomics, concept of demand and its relevance in a market economy.*
- 2. Imparting idea regarding how the different decision-making units (consumers, firms), with limited resources at their disposal, will chose the best alternative among the available alternatives*
- 3. This course also covers the behaviour of a competitive firm. Thus, this paper covers the essential concepts required for understanding other broad areas of economics.*

Course Name: Macroeconomic Theory - I

Course Code: BSCHECOC102

Course Type: Core (Theory)	Course Details:CC-2			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

- 1. To make the students acquainted with the aggregative behaviour of an economic system. The concept of national income, price level, level of employment will guide the learners to judge the situation of an economy in a better manner.*
- 2. To help the learners understand the development of the macroeconomic thoughts from the last quarter of the eighteenth century to mid twentieth century, the Classical and the Keynesian theory of income and employment.*
- 3. To provide the idea regarding the impacts of great depression on the world economy and the development of different macro theories as a consequence of this event.*

Course Name: Microeconomic Theory - I
Course Code: BSCHECOGE101

Course Type: GE(Theory)	Course Details: GEC-1		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To help the learners understand the concept of economics, the distinction between micro economics and macroeconomics, concept of demand and its relevance in a market economy.*
- 2. Informing learners regarding how the different decision-making units (consumers, firms), with limited resources at their disposal, will chose the best alternative among the available alternatives*
- 3. Generating idea with respect to different types of costs and the relevance of costs of production in making pricing decision by a producing unit.*
- 4. This course also covers the behavior of a competitive firm.*

Course Name: Indian Economics: Post Independence

Course Code: BSCHECOGE102

Course Type: GE (Theory)	Course Details: GEC-1			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

- 1 To make the students informed about the situation of the Indian economy in the post- independence regime.*
- 1. To make the learners acquainted with different policies, relating to agriculture, industry etc. undertaken after independence to build up a self-reliant economy.*

2. *To keep the students updated regarding growth experience of the Indian economy amidst huge population pressure and the ways to move the economy in the growth trajectory.*

Semester- II

Course Name: Microeconomic Theory - II

Course Code: BSCHECOC201

Course Type: Core (Theory)	Course Details:CC-3			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. *To understand, the decision making process in different forms of market structure such as monopolistic competition, oligopoly and monopoly markets.*
2. *To deal with the theoretical aspect and issues in the factor pricing theories.*
3. *To understand the framework of General equilibrium and Pareto criteria of optimality.*

Semester- II

Course Name: Mathematical Economics - I

Course Code: BSCHECOC202

Course Type: Core (Theory)	Course Details:CC-4			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. *To understand basic concepts, procedures and techniques of mathematical economics.*
2. *To discuss how these tools can be applied in economics.*

3. To develop analytical ability to express economic ideas using mathematics techniques.

Course Name: Money and Banking

Course Code: BSCHECOGE 201

Course Type: GE (Theory)	Course Details: GEC-2			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To understand some basic ideas relating to monetary analysis and financial markets with reference to Indian financial markets.
2. To gain knowledge about the theories of demand for money and supply of money, measures of money supply in India.
3. To develop knowledge of working of banking- commercial banks, central bank, rural banking, non-banking financial intermediaries.

Course Name: Microeconomic Theory-II

Course Code: BSCHECOGE 202

Course Type: GE (Theory)	Course Details: GEC-2		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be)

1. To understand, the decision making process in different forms of market structure such as monopolistic competition, oligopoly and monopoly markets.
2. To acquire knowledge about the factor pricing theories.

Semester- III

Course Name: Statistical Methods-I

Course Code: BSCHECOC301

Course Type: Core (Theory)	Course Details:CC-5			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand basic knowledge of data presentation, measures of central tendency, dispersion, skewness and kurtosis.*
- 2. To grasp knowledge of correlation, simple regression analysis and Index numbers.*
- 3. To develop skills in the field of economic analysis and reasoning.*

Semester- III

Course Name: Macroeconomic Theory-II

Course Code: BSCHECOC302

Course Type: Core (Theory)	Course Details:CC-6			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To grasp knowledge of various micro foundation theories of macroeconomics for understanding aggregates behavior.*
- 2. To understand theoretical aspects of money demand and money supply theories.*
- 3. To understand various behavioral and theoretical aspect of macroeconomics variables such as consumption investment and inflation.*

Semester- III

Course Name: Development Economics

Course Code: BSCHECOC303

Course Type: Core (Theory)	Course Details:CC-7			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand the different concepts of development such as sustainable development, inclusive development, human development etc.*
- 2. To understand the reasons for, why some countries are rich and others so poor; enables them to factor out the obstacles impeding growth in poor nations and the possible way out.*
- 3. To grasp knowledge of various models to understand process of economic development and the issue of labour surplus economy with respect to choice of technique for development strategy.*

Semester- III

Course Name: Introductory Macroeconomics

Course Code: BSCHECOGE301

Course Type: Core (Theory)	Course Details: GEC-3			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To make the students acquainted with the aggregative behaviour of an economic system. The concept of national income, price level, level of employment will guide the learners to judge the situation of an economy in a better manner.*

2. To help the learners understand the development of the two popular macroeconomic thoughts; the Classical and the Keynesian theory of income and employment.

Semester- III

Course Name: Contemporary Issues of Indian Economy

Course Code: BSCHECOGE302

Course Type: Core (Theory)	Course Details: GEC-3		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To grasp knowledge of Economic planning in India and its impact on Indian economy.
2. To understand the role of public sector during plan period and the reason for disinvestment.
3. To understand foreign trade policy and tax system reform in India.

Semester- III

Course Name: Data Analysis

Course Code: BSCHECOSE301

Course Type: Core (Theory)	Course Details: SEC-1		L-T-P:0-0-8		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To understand methods of presentation of data in textual, tabular and diagrammatic form.

2. To understand steps and problems associated with data processing and the analysis of various forms of data (quantitative, qualitative; cross section, time series).

3. To do Project based on techniques taught in this paper which will be helpful to them in further research.

Semester- III

Course Name: Basic Computer Applications

Course Code: BSCHECOSE302

Course Type: Core (Theory)	Course Details: SEC-1		L-T-P:0-0-8		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To have basic knowledge of using Excel for sorting and filtering data to prepare various chart.

2. To understand how to carry out statistical analysis using Excel.

3. To do Project based on techniques taught in this paper which will be helpful to them in further research.

Semester- IV

Course Name: Statistical Methods-II

Course Code: BSCHECOC401

Course Type: Core (Theory)	Course Details:CC-8			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To examine time series data to extract meaningful statistics and other characteristics of the data.*
- 2. To understand likelihood that a particular event will occur Also they will have clear ideas of the concept of random variables and be familiar with some commonly used discrete and continuous distributions of random variables. They will also be able to estimate population parameters based on random samples and test hypotheses about these parameters.*
- 3. To grasp knowledge of descriptive and inferential statistical concepts for the analysis of economic data.*

Course Name: Indian Economics-I
Course Code: BSCHECOC402

Course Type: Core (Theory)	Course Details:CC-9		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To make the students informed about the situation of the Indian economy in the post-independence regime.*
- 2. To make the learners acquainted with different policies, relating to agriculture, industry etc. undertaken after independence to build up a self-reliant economy.*
- 3. To keep the students updated regarding growth experience of the Indian economy amidst huge population pressure and the ways to move the economy in the growth trajectory.*
- 4. To be aware of the issues of poverty, unemployment and black economy.*

Course Name: Mathematical Economics-II
Course Code: BSCHECOC403

Course Type: Core (Theory)	Course Details:CC-10			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To acquire knowledge of matrices and determinants and their applications in economics.*
- 2. To formulate a given basic description of a real-world problem as a linear programming model. Also students will be able to sketch a graphical representation of a two-dimensional linear programming model. Apart from this students also learned Simplex method to solve linear programming problem by hand using slack variables, tableaus, and pivot variables as a means to finding the optimal solution of an optimization problem.*
- 3. To understand basic of game theory in which they will learn about interdependence of player's as it causes each player to consider the other player's possible decisions, or strategies, in formulating strategy.*

Course Name: Public Economics
Course Code: BSCHECOGE401

Course Type: Core (Theory)	Course Details: GEC-4		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand concept of public goods and externalities. Also, they will learn Principle of taxation.*

2. To get an insight into the various functions of the government and problems in the allocation of the resources.

3. To understand the centre-state relations and problems confronted in the federal finance

Course Name: Development Economics

Course Code: BSCHECOGE402

Course Type: Core (Theory)	Course Details: GEC-4		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To understand the different concepts of development such as sustainable development, inclusive development, human development etc.

2. To understand the reasons for, why some countries are rich and others so poor; enables them to factor out the obstacles impeding growth in poor nations and the possible way out.

3. To grasp knowledge of various models to understand process of economic development and the issue of labour surplus economy with respect to choice of technique for development strategy.

Course Name: Project on Rural Development

Course Code: BSCHECOSE401

Course Type: Core (Theory)	Course Details: SEC-2			L-T-P:0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

(After the completion of the course the students will be able to)

This course encourage students to research on areas of Rural development and to understand various action plan; taken, updated, replaced, failed, continuing for the economic and social upliftment of rural areas. Also, students will be able to understand the policy and approach required to achieve better quality of life of people living in rural areas.

Course Name: Computer Applications in Economics

Course Code: BSCHECOSE402

Course Type: Core (Theory)	Course Details: SEC-2		L-T-P:0-0-8		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

After the completion of the course the students will be able to

- 1. To understand different types of data and their presentation using spreadsheet/Excel.*
- 2. To understand how to carry out statistical analysis using Excel.*
- 3. To do Project based on techniques taught in this paper which will be helpful to them in further research.*

Semester-V

Course Name: Public finance

Course Code: BSCHECOC501

Course Type: Core (Theory)	Course Details:CC-11		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand concept of public goods, externalities and market failure. Also, they will learn Principles of taxation.*
- 2. To get an insight into the various functions of the government and problems in the allocation of the resources.*
- 3. To understand the centre-state relations and problems confronted in the federal finance.*

Semester-V

Course Name: International Economics

Course Code: BSCHECOC502

Course Type: Core (Theory)	Course Details:CC-12			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To develop a strong foundation in the principles of international economics which will help them to know the trade policies at the national and international levels and the impact of the globalization on income, employment and distribution of income.*
- 2. To understand classical and modern theories of international trade. It familiarizes students on trade policies on the one hand and on the other hand introduces open economy macroeconomics dealing with exchange rate determination in presence of 'expectation' and different policies to maintain stability in the external front.*
- 3. To understand and analyze the real-world trade related issues.*

Course Name: Classical Political Economy

Course Code: BSCHECODSE501

Course Type: Core (Theory)	Course Details: DSE (DSE 1&2)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To develop critical thinking of economic thought and enable them to comprehend a larger view of the world around them by analysing socio political structures and link them to economic process.*
- 2. To understand the working of Capitalist economy in a broader economic framework*
- 3. To develop a more holistic approach in their research framework.*

Course Name: Indian Economic History

Course Code: BSCHECODSE502

Course Type: Core (Theory)	Course Details: DSE (DSE 1&2)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To analyze key aspects of Indian economic development during the second half of British colonial rule.**
- 2. To investigate the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule.**
- 3. To understand the plight of Indian economy when it's under Colonial regime.**

Course Name: Money and Financial Market of India
Course Code: BSCHECODSE503

Course Type: Core (Theory)	Course Details: DSE (DSE 1&2)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand the role of money, financial markets, financial institutions and the monetary policy in the economy. Also, they will be able to learn about the problem associated with asymmetric information.*
- 2. To understand about Money and Capital market and the role of financial innovation in expansion of the sector.*
- 3. To understand working of banking system in India and its reform, functioning and role of Reserve bank of India and Current monetary policy of India.*

Course Name: Environmental Economics
Course Code: BSCHECODSE504

Course Type: Core (Theory)	Course Details: DSE (DSE 1&2)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To have a detailed understanding of the discipline of environmental economics, including its key principles and methods.**
- 2. Be able to use economic techniques to analyse environmental problems and to assess environmental policies.**

3. To understand the environmental resource problems, design and implementation of environmental policy and the problem of valuation, also they will know about Environment-Economy Linkages.

4. To understand issues of Climate change and policies of sustainable development.

Semester-VI

Course Name: Basic Econometrics

Course Code: BSCHECOC601

Course Type: Core (Theory)	Course Details:CC-13			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To grasp knowledge of some statistics concepts, simple regression analysis, multiple regression analysis and violation of classical assumptions.

2. To fill the gap between being “a student of economics” and being “a practicing economist.”

3. By completing this introduction to econometrics course students will gain an overview of what econometrics is about, and develop some “intuition” about how causation relationship are establish in empirical studies.

Semester-VI

Course Name: Indian Economics-II

Course Code: BSCHECOC602

Course Type: Core (Theory)	Course Details:CC-14			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand about economic planning in India, Indian tax structure during plan period, role and problems of public sector in India and India's foreign trade policy.*
- 2. To know the development process in India after independence, understand the problems and measures in their contextual perspective as well as able to identify and analyse the genesis of current Indian economy policies.*

Course Name: Economics of Growth
Course Code: BSCHECODSE601

Course Type: Core (Theory)	Course Details: DSE (DSE 3&4)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To grasp knowledge of two exogenous growth theories –Keynesian growth theory which is recognized as Harrod-Domar model and neo-classical growth theory which is well-known as Solow-Swan model. Also students will be learning basic endogenous growth theory (AK model) and the debate on the relevance of Trade as an engine of growth and development with emphasis on import substitution versus export promotion policies.*
- 2. To understand the requirement of long-run equilibrium called steady state, when the economy is growing.*

Course Name: Agricultural Economics
Course Code: BSCHECODSE602

Course Type: Core (Theory)	Course Details: DSE(DSE 3&4)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To instill an interest in agriculture, the backbone of Indian economy*
- 2. To impart a fundamental idea about Agricultural Economics*
- 3. To inculcate in the learners a spirit of enquiry about the various concepts like production, farm organization, agricultural marketing and finance, agricultural policy and so on*
- 4. To learn about the vast unharnessed potentials in Indian agriculture*

Course Name: Entrepreneurial Economics
Course Code: BSCHECODSE603

Course Type: Core (Theory)	Course Details: DSE (DSE 3&4)		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand the role of the entrepreneur and their interaction with the wider economy.*
- 2. To grasp knowledge about; the concepts and basic characteristics of entrepreneurship, role of entrepreneurship in economic development, rural entrepreneurship, project identification and selection, theories of entrepreneurship, sources of finance for new ventures and expansion strategies.*
- 3. By studying entrepreneurial economics students developed positive attitude on areas such as opportunity identification and networking*

Course Name: Project on Socio Economic Aspects
Course Code: BSCHECODSE604

Course Type: Core (Theory)	Course Details: DSE (DSE 3&4)		L-T-P:5-1-0		
	Full Marks:	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical

Credit: 6	50		10		40
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Course Learning Outcomes:

Students are encourage to do project in formal format i.e., writing introduction, review of literature, need/importance of the study, statement of the problem, objectives hypothesis (if any), research methodology, results & discussion, findings, recommendations/suggestions, conclusions, limitations, scope for further research and bibliography. By doing project students will be able to get an exposure to research work at undergraduate level.

BSc Program in Economics

Semester- I

Course Name: Microeconomic Theory - I

Course Code: BSCPECOC101

Course Type: Core (Theory)	Course Details:CC-1		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 5. Understand the concept of economics, the distinction between micro economics and macroeconomics, concept of demand and its relevance in a market economy.*
- 6. Learn how the different decision-making units (consumers, firms), with limited resources at their disposal, will chose the best alternative among the available alternatives.*
- 7. Acquire the concept of different types of cost and the relevance of cost of production in making pricing decision by a producing unit.*

Semester- II

Course Name: Macroeconomic Theory

Course Code: BSCPECOC201

Course Type: Core (Theory)	Course Details:CC-3		L-T-P:5-1-0		
	Full Marks:	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical

Credit: 6	50		10		40
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Course Learning Outcomes:

- 4. To make the students acquainted with the aggregative behaviour of an economic system. The concept of national income, price level, level of employment will guide the learners to judge the situation of an economy in a better manner.*
- 5. To help the learners understand the development of the macroeconomic thoughts from the last quarter of the eighteenth century to mid twentieth century, the Classical and the Keynesian theory of income and employment.*
- 6. To provide the idea regarding the impacts of great depression on the world economy and the development of different macro theories as a consequence of this event.*

Semester- III

Course Name: Microeconomic Theory-II
Course Code: BSCPECO301

Course Type: Core (Theory)	Course Details:CC-5			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 4. To understand, the decision making process in different forms of market structure such as monopolistic competition, oligopoly and monopoly markets.*
- 5. To deal with the theoretical aspect and issues in the factor pricing theories.*

Semester- III

Course Name: Data Collection and Data Processing
Course Code: BSCPECOSE301

Course Type: Core (Theory)	Course Details:SEC-1			L-T-P:0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand methods of presentation of data in textual, tabular and diagrammatic form.*
- 2. To understand steps and problems associated with data processing and the analysis of various forms of data (quantitative, qualitative; cross section, time series).*
- 3. To do Project based on techniques taught in this paper which will be helpful to them in further research.*

Semester- IV

Course Name: Indian Economics

Course Code: BSCPECOC401

Course Type: Core (Theory)	Course Details:CC-7			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To grasp knowledge of Economic planning in India and its impact on Indian economy.*
- 2. To make the learners acquainted with different policies, relating to agriculture, industry etc. undertaken after independence to build up a self-reliant economy.*
- 3. To understand Public finance in Indian context.*

Semester- IV

Course Name: Basic Knowledge in Computer

Course Code: BSCPECOSE401

Course Type: Core (Theory)	Course Details:SEC-2			L-T-P:0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To have basic knowledge of using Excel for sorting and filtering data to prepare various chart.*
- 2. To understand how to carry out statistical analysis using Excel.*
- 3. To do Project based on techniques taught in this paper which will be helpful to them in further research.*

Semester- V

Course Name: Development Economics

Course Code: BSCPECODSE501

Course Type: Core (Theory)	Course Details:DSE		L-T-P:5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Content/ Syllabus: Unit wise course content distribution

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand the concepts and indicators of Economic growth and development.*

- 2. To understand the reasons for, why some countries are rich and others so poor; enables them to factor out the obstacles impeding growth in poor nations and the possible way out.*
- 3. To grasp knowledge of the issue of labour surplus economy.*
- 4. To understand about development of various international institutions.*

Semester- V

**Course Name: Banking Sector
Course Code: BSCPECODSE501**

Course Type: Core (Theory)	Course Details: DSE			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

- 1. To understand functions of commercial banks and central banks.*
- 2. To develop knowledge of working of banking- commercial banks and central bank*
- 3. To understand the working of various kinds of non-banking financial intermediaries.*

**Course Name: Computer Application in Economics
Course Code: BSCPECOSE501**

Course Type: Core (Theory)	Course Details:SEC-3			L-T-P:0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30			20

Course Learning Outcomes:

After the completion of the course the students will be able to

- 1. To understand different types of data and their presentation using spreadsheet/Excel.*

2. To understand how to carry out statistical analysis using Excel.

3. To do Project based on techniques taught in this paper which will be helpful to them in further research.

Semester- VI

Course Name: Economic History of India 1857-1947

Course Code: BSCPECODSE601

Course Type: Core (Theory)	Course Details: DSE			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To analyze key aspects of Indian economic development during the second half of British colonial rule.

2. To investigate the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule.

3. To understand the plight of Indian economy when it's under Colonial regime.

Course Name: Public Finance

Course Code: BSCPECODSE602

Course Type: Core (Theory)	Course Details:DSE			L-T-P:5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			10		40

Course Learning Outcomes:

(After the completion of the course the students will be able to)

1. To understand concept of public goods and externalities. Also, they will learn Principle of taxation.

2. To get an insight into the various functions of the government and problems in the allocation of the resources.

3. To understand the centre-state relations and problems confronted in the federal finance.

Course Name: Project on Economic Issues

Course Code: BSCPECOSE601

Course Type: Core (Theory)	Course Details: SEC-4			L-T-P:0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30		20	

Course Learning Outcomes:

Students are encourage to do project in formal format i.e., writing introduction, review of literature, need/importance of the study, statement of the problem, objectives hypothesis (if any), research methodology, results & discussion, findings, recommendations/suggestions, conclusions, limitations, scope for further research and bibliography. By doing project students will be able to get an exposure to research work at undergraduate level.

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF GEOGRAPHY**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BSC HONOURS IN GEOGRAPHY
TABLE 1: COURSE LEARNING OUTCOMES

COURSE CODE	COURSE TITLE	COURSE TYPE	COURSE LEARNING OUTCOMES
UG SEMESTER I (HONOURS)			
BSCHGEOC101	GEOMORPHOLOGY	CORE (THEORY)	1. Understand the functioning of landform systems in real time and analyze how the natural and anthropogenic operating factors affects the development of landforms 2. Distinguish between the mechanisms that control these processes 3. Assess the role of structure, stage and time in shaping the landforms, interpret geological maps and apply the knowledge in geographical research.
BSCHGEOC102	CARTOGRAPHIC TECHNIQUES	CORE (PRACTICAL)	1. Understand the importance of scale in geography. 2. Read and prepare maps, comprehend locational and spatial aspects of the earth surface. 3. Use and importance of maps for regional development and decision making.
BSCHGEOGE101	DISASTER MANAGEMENT	GENERIC ELECTIVE (THEORETICAL)	1. Gain a perspective of disasters and various dimensions of disaster management 2. Have comprehensive knowledge of various natural and manmade disasters in India 3. Examine the response and mitigation measures of disasters
BSCHGEOGE102	GEOGRAPHY OF TOURISM & PILGRIMAGE	GENERIC ELECTIVE (THEORETICAL)	1. Equip with a basic understanding of nature and scope, trends and patterns of various types of tourisms. 2. Have sound knowledge on

			<p>geographical, environmental and socio-cultural aspects of tourism in India.</p> <p>3. Apply the principles of Geo-tourism and analyse the prospects and problems associated with pilgrimage tourism.</p>
UG SEMESTER II (HONOURS)			
BSCHGEOC201	GEOGRAPHY OF HUMAN & CULTURAL LANDSCAPE	CORE (THEORETICAL)	<p>1. To Know the diversity of changing human and cultural landscape.</p> <p>2. Understand of population growth and its implications.</p> <p>3. Understand the diversity of culture.</p>
BSCHGEOC202	STATISTICAL METHOD IN GEOGRAPHY	CORE (PRACTICAL)	<p>1. Understand the basics of data collection and sampling.</p> <p>2. Comprehend the representation and interpretation of the results.</p> <p>3. Practice results in research.</p>
BSCHGEOGE201	GEOSPATIAL INFORMATION TECHNOLOGY	GENERIC ELECTIVE (THEORETICAL)	<p>1. Learn the basic concepts of geographical information technology.</p> <p>2. Acquire knowledge on data structure, interpolation, modelling, functions and working of geographical information technology</p> <p>3. Apply the geographical information technology for certain purpose.</p>
BSCHGEOGE202	HUMAN & ENVIRONMENT SYSTEM	GENERIC ELECTIVE (THEORETICAL)	<p>1. Understand the fundamental concepts of human-environment system.</p> <p>2. Assess the vulnerability, risk and resilience issues associated with the human-environment interrelationships.</p> <p>3. Develop possible solutions for addressing the contemporary sustainability challenges.</p>

UG SEMESTER III (HONOURS)			
BSCHGEOC301	CLIMATOLOGY & OCEANOGRAPHY	CORE (THEORETICAL)	<ol style="list-style-type: none"> 1. Understand the elements of weather and climate and its impacts at different scales. 2. Comprehend the climatic aspects and its bearing on planet earth. 3. Understand the oceanic process and availability of resources.
BSCHGEOC302	GEOGRAPHY OF INDIA	CORE (THEORETICAL)	<ol style="list-style-type: none"> 1. Understand the physical profile of the country 2. Study the resource endowment and its spatial distribution and utilization for sustainable development 3. Synthesise and develop the idea of regional dimensions at present.
BSCHGEOC303	FUNDAMENTALS OF REMOTE SENSING	CORE (PRACTICAL)	<ol style="list-style-type: none"> 1. Appreciate the strength and application of remote sensing 2. Map the resources, their location and availability using GIS software. 3. Apply this knowledge for sustainable development at local to global level.
BSCHGEOSE301	GEOGRAPHIC INFORMATION SYSTEM	SKILL ENHANCEMENT (PRACTICAL)	<ol style="list-style-type: none"> 1. Understand various components and principles of GIS 2. Construct the thematic maps using different digital layers 3. Apply GIS in various geographical studies
BSCHGEOSE302	SPATIAL STATISTICAL TECHNIQUES	SKILL ENHANCEMENT (PRACTICAL)	<ol style="list-style-type: none"> 1. Understand the basics of data collection and, processing for the meaningful outcomes 2. Understand the selection of proper sampling techniques for the collection of data 3. Put into practice the results obtained for spatial analysis of results and to apply various

			statistical softwares for the study
BSCHGEOSE303	GEOGRAPHICAL TECHNIQUES	SKILL ENHANCEMENT (PRACTICAL)	<ol style="list-style-type: none"> 1. Gain knowledge about drawing of longitudinal sections and interpretation of structure of the geological maps. 2. Predict Soil fertility (NPK, pH). 3. Acquire practical knowledge about the application of various metrological instruments. 4. Interpret and predict the climatic condition of an area.
BSCHGEOGE301	CLIMATE CHANGE, VULNERABILITY & ADAPTATION	GENERIC ELECTIVE (THEORETICAL)	<ol style="list-style-type: none"> 1. Understand the foundational concepts of climate change and its impacts. 2. Assess the human and environmental vulnerability to climate change. 3. Learn the various adaptation and mitigation for reducing the impacts of climate change and national action plan.
BSCHGEOGE302	RURAL DEVELOPMENT	GENERIC ELECTIVE (THEORETICAL)	<ol style="list-style-type: none"> 1. Appreciate the concepts, needs and various approaches to rural development; 2. Understand the strong economic bases of rural areas of India; 3. Appreciate the area based and target group-based approaches and provision of services to rural development.
UG SEMESTER IV (HONOURS)			
BSCHGEOC401	INTRODUCTION TO GLOBAL ECONOMIC SYSTEM	CORE (THEORETICAL)	<ol style="list-style-type: none"> 1. Know different types of economic activities and their utilities. 2. Understand the theories that are relevant to

			contemporary world. 3. Examine the importance of economic initiatives that are crucial to development.
BSCHGEOC402	ENVIRONMENT & NATURAL RESOURCE MANAGEMENT	CORE (THEORETICAL)	1. Understand the relationship between man and environment. 2. Have good understanding on distribution, utilization and proper management of natural resources. 3. Know about the necessities that are pre-requisite for assessment and review of planning and policies.
BSCHGEOC403	DIGITAL REMOTE SENSING	CORE (PRACTICAL)	1. Develop the skill so as to use digital satellite data using software 2. Prepare the maps based with satellite data to compare with the ground realities. 3. Classify digital data for the land use/land cover and urban studies
BSCHGEOSE401	INTRODUCTION TO GI SCIENCE	SKILL ENHANCEMENT (PRACTICAL)	1. Have comprehensive understanding of GIS. 2. Have knowledge of using GPS & DGPS for the accurate location 3. Apply the GI Science platform for map making.
BSCHGEOSE402	THEMATIC ATLAS	SKILL ENHANCEMENT (PRACTICAL)	1. Have sound knowledge regarding the classification and elements of maps. 2. Have proper utilization of maps for explaining geographical issues. 3. Know the methods of preparation of various thematic maps.
BSCHGEOGE401	INDUSTRIAL DEVELOPMENT	GENERIC ELECTIVE (THEORETICAL)	1. Understand the factors responsible for location of an industry. 2. Differentiate various types of industries and gain knowledge about industrial regions and

			<p>policies of India.</p> <p>3. Understand the socio-economic and environmental implications of various types of industries.</p>
BSCHGEOGE402	SUSTAINABLE RESOURCE DEVELOPMENT	GENERIC ELECTIVE (THEORETICAL)	<p>1. Understand difficulties in defining the components of sustainable development in different contexts.</p> <p>2. Distinguish the patterns of regional development of the world and the need for sustainable development plan.</p> <p>3. Critically analyse the efforts and initiatives of the Governments in reducing the levels of poverty and inequality among the people of various countries.</p>
UG SEMESTER V (HONOURS)			
BSCHGEOC501	REGIONAL PLANNING & SUSTAINABLE DEVELOPMENT	CORE (THEORETICAL)	<p>1. Identify notable backward regions and solutions for their overall development</p> <p>2. Have comprehensive understanding regarding the different regions and application of different models and theories for integrated regional development.</p> <p>3. Select appropriate indicators for the measurement of socio-economic regional development.</p>
BSCHGEOC502	FIELD TECHNIQUES, SURVEYING AND RESEARCH METHODS	CORE (PRACTICAL)	<p>1. Conduct proper field work for the collection of primary data to bring out grassroots realities.</p> <p>2. Make use of proper tools and surveying methods for measurement in context of collection and processing of data.</p>

			3. Prepare a report based on field data.
BSCHGEODSE501	GEOGRAPHY OF WEST BENGAL	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand physical geography of West Bengal and availability of resources 2. Understand the demography, economy and regional issues of West Bengal 3. Assess the developmental problems of West Bengal in the context of future planning
BSCHGEODSE502	AGRICULTURE & FOOD SECURITY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Conceptualise the agriculture and its determinants. 2. Get the overview of Indian and World agriculture regions and systems. 3. Have sound knowledge of agriculture revolutions and food security
BSCHGEODSE503	POPULATION GEOGRAPHY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Learn the role of demography and population studies as a distinct field of human geography 2. Have sound knowledge of key concept, different components of population along with its drivers 3. Examine population dynamics and characteristic with contemporary issues
BSCHGEODSE504	HYDROLOGY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the basic components of hydrological cycle and comprehend practices of integrated watershed management. 2. Evaluate the water balancing and river basin and water disputes. 3. Study the soil as a basic resource, focusing its distribution, problems and management.
UG SEMESTER VI (HONOURS)			
BSCHGEOC601	EVOLUTION OF	CORE	1. Understand paradigms in

	GEOGRAPHICAL THOUGHT	(THEORETICAL)	geography discipline through time 2. Understand the development of geographical thinking. 3. Understand the past and future trends of geography as a discipline.
BSCHGEOC602	DISASTER MANAGEMENT PROJECT WORK	CORE (PRACTICAL)	1. Understand processes and impact of disaster on empirical basis. 2. Distinguish both the natural and man-made disaster. 3. Design and prepare project work on disasters.
BSCHGEODSE601	GEOGRAPHY OF HEALTH	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the key concepts related to health. 2. Identify the linkages between the health and environment. 3. Explain the relationships between health and environment with reference to climate change
BSCHGEODSE602	POLITICAL GEOGRAPHY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Learn the concept of nation and state and geopolitical theories 2. Understand the different dimensions of resource conflicts on geopolitical base. 3. Acquire sound knowledge on politics of contemporary displacement.
BSCHGEODSE603	BIOGEOGRAPHY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Familiarise the dynamics of climate and related theories. 2. Understand of Vegetation as an index of climate. 3. Assess of different aspects of floral and faunal provinces
BSCHGEODSE604	GEOGRAPHY OF SOCIAL WELL- BEING	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the nature, scope and relationships of geography and human wellbeing. 2. Understand the spatial dimensions of social

			diversity components. 3. Critically analyse the social welfare programs related to inclusive and exclusive policies in India.
BSCHGEODSE605	URBANISATION AND URBAN SYSTEM	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the fundamentals and patterns of urbanization process 2. Learn the functional classification of cities and Central Place Theory 3. Know contemporary problems of Delhi, Mumbai, Kolkata and Chennai
BSCHGEODSE606	SOIL GEOGRAPHY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the concepts related to soil. 2. To know the soil diversities and importance of their preservation 3. To know about soil fertility and its significance

BSC PROGRAM IN GEOGRAPHY

COURSE CODE	COURSE TITLE	COURSE TYPE	COURSE LEARNING OUTCOMES
UG SEMESTER I (PROGRAM)			
BSCPGEOC101	PHYSICAL GEOGRAPHY	CORE (THEORETICAL)	1. Understand the components of the earth system – atmosphere, lithosphere and hydrosphere 2. Appreciate and understand various features of the spheres with local, regional and global examples; 3. Associate and bring out the relationships of the features of one sphere with other spheres.
UG SEMESTER II (PROGRAM)			
BSCPGEOC201	HUMAN GEOGRAPHY	CORE (THEORETICAL)	1. Understand the basic concepts in various sub-fields of human geography; 2. Appreciate the growth, distribution and composition of population in different parts of the

			world; 3. Analyse the types and patterns of rural and urban settlements, urbanisation and related issues in India and other regions of the world.
UG SEMESTER III (PROGRAM)			
BSCPGEOC301	CARTOGRAPHIC TECHNIQUES	CORE (THEORETICAL)	1. Understand various types of maps and their elements. 2. Understand how projections are applied to prepare maps from the globe; 3. Learn prepare maps from geographic data and their interpretations.
BSCPGEOSE301	REGIONAL PLANNING & SUSTAINABLE DEVELOPMENT	SKILL ENHANCEMENT (THEORETICAL)	1. Understand the need of regional planning methodology. 2. Know the history of various planning strategies for balanced national development; 3. Capable of diagnosing the regional issues.
UG SEMESTER IV (PROGRAM)			
BSCPGEOC401	ENVIRONMENTAL GEOGRAPHY	CORE (THEORETICAL)	1. Appreciate the structure and functions of ecosystems with examples 2. Understand the environmental problems and relevant management strategies 3. Acquire knowledge about the new environmental policies and the need to revise policies to tackle the environmental issues of India, in particular
BSCPGEOSE401	FUNDAMENTALS OF REMOTE SENSING AND GPS	SKILL ENHANCEMENT (PRACTICAL)	1.Appreciate the development and uses of aerial and satellite remote sensing system and navigation satellite systems in India and other nations; 2. Understand the basics of EMR and energy interaction in atmosphere and on earth surface

			features; 3. Analyse and interpret the aerial and satellite data products and GNSS/GPS survey results.
UG SEMESTER V (PROGRAM)			
BSCPGEODSE501	SYSTEMATIC GEOGRAPHY OF INDIA	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Learn about physiography of India; 2. Understand the Indian demographic and settlement structure. 3. Study the economy and various types of resources in India.
BSCPGEODSE502	WORLD ECONOMIC GEOGRAPHY	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1. Understand the basic concepts and approaches of economic geography. 2. Examine the significance and relevance of economic theories and different economic activities. 3. Understanding the pre-requisites of different economic activities.
BSCPGEODSE501	FIELD TECHNIQUES & SURVEYING METHODS	SKILL ENHANCEMENT (PRACTICAL)	1. Conduct field work in physical and human geography, besides investigating socio-economic and environmental issues; 2. Develop tools to collect primary data from the field and interpret them meaningfully; 3. Prepare field report with suitable tables, maps and diagrams based on the data collected from the field and secondary sources.
UG SEMESTER VI (PROGRAM)			
BSCPGEODSE601	DISASTER RISK REDUCTION	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1.Acquire knowledge on concepts, types, distribution and mapping of disasters in India; 2. Understand the man-made disasters and human negligence in the context of environment;

			3. Bring awareness about the preparedness, mitigation and processes of disaster risk reduction.
BSCPGEODSE602	GEOGRAPHY OF TOURISM	DISCIPLINE SPECIFIC ELECTIVE (THEORETICAL)	1.Appreciate the basic concepts and geographical parameters of tourism; 2. Acquire knowledge on the recent trends and patterns of tourism development in India and other countries; 3. Understand the impacts of tourism on national, regional and local economy, environment and society.
BSCPGEOSE601	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEM	SKILL ENHANCEMENT (PRACTICAL)	1. Appreciate the basic principles and components of GIS; 2. Apply raster and vector data structure for GIS analysis; 3. Analyse the basic resources, land use and urban related data using GIS software for meaningful interpretation.

PROGRAMME OUTCOME

- Demonstrating the understanding of basic concepts in geography.
- Demonstrating the coherent and systematic knowledge in the discipline of geography to deal with current issues and their solution.
- Display an ability to read and understand maps and topographic sheets to look at the various aspects on the space.
- Cultivate ability to evaluate critically the wider chain of network of spatial aspects from global to local level on various time scales as well.
- Recognize the skill development in Geographical studies programme as part of career avenues in various fields like teaching, research and administration.

PROGRAMME SPECIFIC OUTCOME

1. Understand the relevance of geographical knowledge to everyday life.
2. Getting the ability to communicate geographic information utilizing both lecture and

practical exercises.

3. Inculcate the ability to evaluate geographical problems effectively.
4. Exhibit the skill in using geographical research tools including spatial statistics, qualitative analysis, cartography, remote sensing, GIS, IRNSS and GIScience.

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF MATHEMATICS**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

BSC HONS IN MATHEMATICS
COURSE LEARNING OUTCOMES

SEMESTER-I

CORE COURSE - 1

Course Name: Calculus, Geometry & Differential Equations

Course Code: BSCHMTMC101

Course Type: Core (Theoretical)	Course Details: CC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand various kinds of standard functions and graphs, techniques of integrations and limits.
- Learn about real numbers and its basic properties.
- Understand the concepts on three-dimensional geometry.
- Understand the genesis of ordinary differential equations.
- Understand the various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order.

CORE COURSE - 2

Course Name: Algebra

Course Code: BSCHMTMC102

Course Type: Core (Theoretical)	Course Details: CC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the importance of roots of real and complex polynomials and learn various methods of obtaining roots.
- Employ De Moivre's theorem in a number of applications to solve numerical problems.
- Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix, using rank.
- Find eigenvalues and corresponding eigenvectors for a square matrix.

SEMESTER-II

CORE COURSE - 3

Course Name: Real Analysis

Course Code: BSCHMTMC201

Course Type: Core (Theoretical)	Course Details: CC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand many properties of the real line \mathbb{R} and learn to define sequence in terms of functions from \mathbb{R} to a subset of \mathbb{R} .
- Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence.
- Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.
- Understand the theory and concepts of Riemann integration.
- Understand the applications of the fundamental theorems of integration.

CORE COURSE - 4

Course Name: Differential Equations and Vector Calculus

Course Code: BSCHMTMC202

Course Type: Core (Theoretical)	Course Details: CC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Learn the Picard's method of obtaining successive approximations of solutions of first order ordinary differential equations.
- Know how to solve linear homogeneous and non-homogeneous equations of higher order with constant coefficients.
- Understand the system of linear differential equations and the solution techniques.
- Learn conceptual differences between usual solution and power series solution of some second order ODEs .
- Understand the theory and applications of vector analysis.

SEMESTER- III

CORE COURSE - 5

Course Name: Multivariable Calculus

Course Code: BSCHMTMC301

Course Type: Core (Theoretical)	Course Details: CC-5			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Learn conceptual differences while advancing from one variable to several variables in calculus.
- Apply multivariable calculus in various optimization problems.
- Understand inter-relationship amongst the line integral, double and triple integral formulations.
- Visualise the structure of curves and surfaces in plane and space etc.
- Learn the applications of multivariable calculus in different fields like Physics, Economics, Medical Sciences, Animation & Computer Graphics etc.
- Realize importance of Green, Gauss and Stokes' theorems in other branches of Mathematics.

CORE COURSE - 6

Course Name: Group Theory

Course Code: BSCHMTMC302

Course Type: Core (Theoretical)	Course Details: CC-6		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: The course will enable the students to:

- Realize the basic concept of mathematical composition.
- Link the fundamental concepts of groups and symmetries of geometrical objects.
- Explain the significance of the notions of cosets, normal subgroups, and factor groups.
- Analyze consequences of Lagrange's theorem.
- Learn about structure preserving maps between groups and their consequences.

CORE COURSE-7

Course Name: Probability and Statistics

Course Code: BSCHMTMC303

Course Type: Core (Theoretical)	Course Details: CC-7			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		...	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand distributions in the study of the joint behaviour of two random variables.
- Establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression.
- Understand central limit theorem, which establish the remarkable fact that the empirical frequencies of so many natural populations, exhibit a bell shaped curve.

SKILL ENHANCEMENT COURSE-1

(Choose any one from the following)

Course Name: Mathematical Logic

Course Code: BSCHMTMSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the syntax of first-order logic and semantics of first-order languages

- Understand about truth table, different propositions, predicates and quantifiers, basic Theorems like the Compactness Theorem, Meta Theorem and Post Tautology Theorem.
- Grasp the concept of completeness interpretations and their applications with special stress on applications in Algebra.

Course Name: Programming Language in C

Course Code: BSCHMTMSE302

Course Type: SE	Course Details: SEC-1			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Acquire knowledge about one of the advanced computer language C and its applications.
- Understand basic structure, characters, keywords, identifiers, data types, operators, expressions, etc. in C language.
- Write flow chart and corresponding C-program for solving problems requiring decision making, branching, looping and other control statements.
- Learn to implement arrays and functions in C programming.
- Familiarize with the concepts of structure, union and pointers.

SEMESTER IV

CORE COURSE - 8

Course Name: Mechanics

Course Code: BSCHMTMC401

Course Type: C	Course Details: CC-8			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to:

- Familiarize with subject matter, which has been the single centre, to which were drawn mathematicians, physicists, astronomers, and engineers together.
- Understand necessary conditions for the equilibrium of particles acted upon by various forces and learn the principle of virtual work for a system of coplanar forces acting on a rigid body.
- Determine the centre of gravity of some materialistic systems and discuss the equilibrium of a uniform cable hanging freely under its own weight.
- Deal with the kinematics and kinetics of the rectilinear and planar motions of a particle including the constrained oscillatory motions of particles.
- Learn that a particle moving under a central force describes a plane curve and know the Kepler's laws of the planetary motions, which were deduced by him long before the mathematical theory given by Newton.

CORE COURSE - 9

Course Name: Linear Algebra

Course Code: BSCHMTMC402

Course Type: C	Course Details: CC-9		L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		.....	10	..... 40

Course Learning Outcomes: This course will enable the students to:

- Understand the concepts of vector spaces, subspaces, bases, dimension and their properties.
- Relate matrices and linear transformations; compute eigen values and eigen vectors of linear transformations.
- Learn properties of inner product spaces and determine orthogonality in inner product spaces.
- Realise the importance of adjoint of a linear transformation and its canonical form.

CORE COURSE - 10

Course Name: Partial Differential Equations and Calculus of Variations

Course Code: BSCHMTMC403

Course Type: C	Course Details: CC-10			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the geometric and physical nature of Partial Differential Equations and classify them accordingly.
- Apply a range of techniques to solve first and second order partial differential equations.
- Model physical phenomena using partial differential equations such as the heat and wave equations.
- Understand problems, methods and techniques of calculus of variations.

SKILL ENHANCEMENT COURSE - 2

(Choose any one from the following)

Course Name: Graph Theory

Course Code: BSCHMTMSE401

Course Type: SE	Course Details: SEC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Appreciate the definition and basics of graphs along with types and their examples.
- Understand the Eulerian circuits, Eulerian graphs, Hamiltonian cycles, representation of a graph by matrix.
- Relate the graph theory to the real-world problems.

Course Name: Object Oriented Programming in C++

Course Code: BSCHMTMSE402

Course Type: SE	Course Details: SEC-2			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the basic characteristics of object oriented programming languages, different components and structures in C++ programming language.
- Understand and apply the programming concepts of C++ which is important for mathematical investigation and problem solving.
- Use mathematical libraries for computational objectives.
- Represent the outputs of programs visually in terms of well formatted text and plots.

SEMESTER V

CORE COURSE - 11

Course Name: Set Theory and Metric Spaces

Course Code: BSCHMTMC501

Course Type: C	Course Details: CC-11			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to:

- Learn basics about the cardinality of a set.

- Learn abstract formulation of the notion “distance” on an arbitrary set and learn how known concepts like continuity, convergence of sequences etc behave in such abstract setting.
- Understand several standard concepts of metric spaces and their properties like openness, closeness, completeness, compactness, Bolzano-Weierstrass property, and connectedness.
- Identify the continuity of a function defined on metric spaces and homeomorphisms.

CORE COURSE - 12

Course Name: Advanced Algebra

Course Code: BSCHMTMC502

Course Type: C	Course Details: CC-12			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the automorphism, inner automorphism and the fundamental concepts of group actions and their applications
- Understand the application of Sylow theorems to characterize certain Finite Groups.
- Be acquainted with the basic concepts of Ring Theory such as the concepts of ideals, quotient rings, Integral domains and Fields.
- Know in detail about polynomial rings, fundamental properties of finite field extensions and classification of Finite Fields.

DISCIPLINE SPECIFIC ELECTIVE (DSE-1 & DSE-2)

(Choose any Two from the following)

Course Name: Tensors & Differential Geometry

Course Code: BSCHMTMDSE501

Course Type: DSE	Course Details: DSE-1 & DSE-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Explain the basic concepts of tensors.

- Understand role of tensors in differential geometry.
- Learn various properties of curves including Frenet-Serret formulae and their applications.
- Know the interpretation of the curvature tensor, Geodesic curvature, Gauss and Weingarten formulae.
- Understand the role of Gauss's TheoremaEgregium and its consequences.
- Apply problem-solving with differential geometry to diverse situations in physics, engineering and in other mathematical contexts.

Course Name: Integral Transforms and Fourier Analysis

Course Code: BSCHMTMDSE502

Course Type: DSE	Course Details: DSE-1 & DSE-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Learn Fourier series, Bessel's inequality, term by term differentiation and integration of Fourier series.
- Know about Fourier Transform and its relation with Fourier Series, Laplace Transform and its relation with Fourier Transform and the sufficient conditions for their existence.
- Familiarise with the properties of Fourier and Laplace Transforms.
- Learn to apply Fourier and Laplace Transforms to well-known functions.
- Learn to find inverse Laplace Transform and inverse Fourier Transform.
- To be able to solve real world initial value, boundary value and initial-boundary problems using Integral Transforms or Fourier Series.

Course Name: Linear Programming and Game Theory

Course Code: BSCHMTMDSE503

Course Type: DSE	Course Details: DSE-1 & DSE-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Analyze and solve linear programming models of real life situations.
- Provide graphical solution of linear programming problems with two variables, and illustrate the concept of convex set and extreme points.
- Solve linear programming problems using simplex method.
- Learn techniques to solve transportation and assignment problems.
- Solve two-person zero sum game problems.

Course Name: Special Theory of Relativity

Course Code: BSCHMTMDSE504

Course Type: DSE	Course Details: DSE-1 & DSE-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the basic concepts of Special Relativity including Michelson-Morley experiment and geometrical interpretations of Lorentz transformation equations.
- Learn about length contraction, time dilation and relativity of simultaneity.
- Study 4-dimensional Minkowskian space-time and its properties.
- Understand the concepts of 4-vectors, mass-energy equivalence and equations of motion as a part of relativistic mechanics.
- Imbibe connections between relativistic mechanics and electromagnetism.

SEMESTER VI

CORE COURSE - 13

Course Name: Complex Analysis

Course Code: BSCHMTMC601

Course Type: C	Course Details: CC-13			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to:

- Visualize complex numbers as points of \mathbb{R}^2 and stereographic projection of complex plane on the Riemann sphere.

- Understand the significance of differentiability and analyticity of complex functions leading to the Cauchy-Riemann equations.
- Learn the role of Cauchy-Goursat theorem and Cauchy integral formula in evaluation of contour integrals.
- Apply Liouville's theorem in fundamental theorem of algebra.
- Understand the convergence, term by term integration and differentiation of a power series.
- Learn Taylor and Laurent series expansions of analytic functions, classify the nature of singularity, poles and residues and application of Cauchy Residue theorem.

CORE COURSE - 14

Course Name: Numerical Methods & Numerical Lab

Course Code: BSCHMTMC602

Course Type: C (Theoretical + Practical)	Course Details: CC-14			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: This course will enable the students to

- Understand the problem solving skills using numerical methods,
- Handle large system of equations, non-linearity and that are often impossible to solve analytically,
- Solve differential equations by numerical methods,
- Develop problem solving skills using computer programming,
- Acquire knowledge of C programming language,
- Solve different numerical problems using algorithm, flowchart, C language programming.

DISCIPLINE SPECIFIC ELECTIVE (DSE-3 & DSE-4)

(Choose any two from the following)

Course Name: Discrete Mathematics

Course Code: BSCHMTMDSE601

Course Type: DSE	Course Details: DSE-3 & DSE-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Learn about partially ordered sets, lattices and their types.
- Understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications.
- Solve real-life problems using finite-state and Turing machines.
- Assimilate various graph theoretic concepts and familiarize with their applications.

Course Name: Number Theory

Course Code: BSCHMTMDSE602

Course Type: DSE	Course Details: DSE-3 & DSE-4		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to:

- Learn about some important results in the theory of numbers including the prime number theorem, Chinese remainder theorem, Euler's theorem, Wilson's theorem and their consequences.
- Learn about number theoretic functions, modular arithmetic and their applications.
- Familiarise with modular arithmetic and find primitive roots of prime and composite numbers.
- Know about open problems in number theory, namely, the Goldbach conjecture and Twin-prime conjecture.
- Apply public crypto systems, in particular, RSA.

Course Name: Advanced Mechanics**Course Code: BSCHMTMDSE603**

Course Type: DSE	Course Details: DSE-3 & DSE-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the reduction of force system in three dimensions to a resultant force acting at a base point and a resultant couple.
- Learn about a null point, a null line, and a null plane with respect to a system of forces acting on a rigid body together with the idea of central axis.
- Know the inertia constants for a rigid body and the equation of momental ellipsoid together with the idea of principal axes and principal moments of inertia to derive Euler's dynamical equations.
- Study the kinematics and kinetics of fluid motions to understand the equation of continuity in cartesian, cylindrical polar and spherical polar coordinates which are used to derive Euler's equations and Bernoulli's equation.
- Deal with two-dimensional fluid motion using the complex potential.
- Understand the concepts of sources, sinks, doublets and the image systems of these with regard to a line and a circle.

Course Name: Bio Mathematics**Course Code: BSCHMTMDSE604**

Course Type: DSE	Course Details: DSE-3 & DSE-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Grasp the idea of various bio-mathematical models and techniques which will help them to tackle physical world problems.

Pool of Generic Elective Calculus

[Students of a Particular Honours department will choose one
Generic Elective Paper of any other existing Honours
Department except his/her Department from the pool provided
below]

Semester I

GENERIC ELECTIVES [GE-1(1)]

Course Name: Differential Calculus

Course Code: BSCHMTMGE101

Course Type: GE	Course Details: GEC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Assimilate the notions of limit of a sequence and convergence of a series of real numbers.
- Calculate the limit and examine the continuity of a function at a point.
- Understand the concepts and applications of various mean value theorems for differentiable functions.
- Sketch curves in Cartesian and polar coordinate systems.

Semester II

GENERIC ELECTIVES [GE-1(2)]

Course Name: Differential Equations and Vector Calculus

Course Code: BSCHMTMGE201

Course Type: GE	Course Details: GEC-2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Learn various methods to find the solutions of ordinary differential equations.
- Understand the central concepts in multivariable analysis, including space curves;

directional derivative; gradient; multiple integrals; line and surface integrals; vector fields; divergence, curl and flux;

Semester III

GENERIC ELECTIVES [GE-1(3)]

Course Name: Linear and Modern Algebra

Course Code: BSCHMTMGE301

Course Type: GE	Course Details: GEC-3			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand the concepts of different types of groups, rings and field.
- Understand the basic concepts of group actions and their applications.
- Understand the concepts of vector spaces, sub-spaces, linear dependence and linear independence of a finite set of vectors.

Semester IV

GENERIC ELECTIVES [GE-1(4)]

Course Name: Basics in Real Analysis

Course Code: BSCHMTMGE401

Course Type: GE	Course Details: GEC-4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes: This course will enable the students to

- Understand about sets in \mathbb{R} , sequences, series of functions and infinite series.

**BSC PROGRAM IN MATHEMATICS
COURSE LEARNING OUTCOMES**

SEMESTER I

CORE COURSE - 1(1)

Course Name: Differential Calculus

Course Code: BSCPMTMC101

Course Type: C	Course Details: CC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand limit, continuity, differentiability and partial differentiation.
- Learn Rolle's Theorem, mean value theorems, maxima and minima, indeterminate forms and different applications of calculus.

SEMESTER II

CORE COURSE - 1(2)

Course Name: Differential Equations and Vector Calculus

Course Code: BSCPMTMC201

Course Type: C	Course Details: CC-1(2)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:*(After the completion of course, the students will have ability to):*

- Learn various methods to find the solutions of ordinary differential equations.
- Understand the central concepts in vector calculus; vector-valued functions; gradient, divergence and curl.

SEMESTER III**CORE COURSE - 1(3)****Course Name: Basics in Algebra****Course Code: BSCPMTMC301**

Course Type: C	Course Details: CC-1(3)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:*(After the completion of course, the students will have ability to):*

- Understand the concepts of different types of groups, rings and field.
- Solve a system of non-homogeneous linear equations.
- Understand the concepts of real vector space, sub-space and linear dependence and independence of a finite set of vectors.

SEMESTER IV**CORE COURSE - 1(4)****Course Name: Introduction to Real Analysis****Course Code: BSCPMTMC401**

Course Type: C	Course Details: CC-1(4)			L-T-P: 5-1-0	
		CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical

Credit: 6	Full Marks: 50	10	40
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Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand about sets in R, sequences, series of functions and infinite series.

SEMESTER V

DISCIPLINE SPECIFIC ELECTIVE (DSE-1(1))

(Choose any one from the following)

Course Name: Mechanics

Course Code: BSCPMTMDSE501

Course Type: DSE	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand the basic concepts of mechanics with examples and applications of real world problems.

Course Name: Numerical Analysis

Course Code: BSCPMTMDSE502

Course Type: DSE	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand the problem solving skills using numerical methods,
- Handle large system of equations, non-linearity and and that are often impossible to solve analytically,
- Solve differential equations by numerical methods.

SEMESTER VI

DISCIPLINE SPECIFIC ELECTIVE (DSE-1(2))

(Choose any one from the following)

Course Name: Linear Programming Problems

Course Code: BSCPMTMDSE601

Course Type: DSE	Course Details: DSEC-1(2)		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Analyze and solve linear programming models of real life situations.
- Provide graphical solution of linear programming problems with two variables, and illustrate the concept of convex set and extreme points.
- Solve linear programming problems using simplex method.
- Learn techniques to solve transportation and assignment problems.

Course Name: Probability & Statistics

Course Code: BSCPMTMDSE602

Course Type: DSE	Course Details: DSEC-1(2)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand the basic concepts on probability and statistics.
- Understand the various probability distributions and their applications, mathematical expectation, moments.

Semester III

SKILL ENHANCEMENT COURSE (SEC-1)

Course Name: Sets and Mathematical Logic

Course Code: BSCPMTMSE301

Course Type: SE	Course Details: SEC-1		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand about different propositions of logic, truth table, logical operators, various operations and relations related to sets.

Semester IV

SKILL ENHANCEMENT COURSE (SEC-2)

Course Name: Boolean Algebra

Course Code: BSCPMTMSE401

Course Type: SE	Course Details: SEC-2		L-T-P: 4-0-0		
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications.
- Apply a number of proof techniques to theorems in language design.

Semester V

SKILL ENHANCEMENT COURSE (SEC-3)

Course Name: Number Theory

Course Code: BSCPMTMSE501

Course Type: SE	Course Details: SEC-3			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Learn Fermat's theorem, linear Diophantine equation, congruences, Goldbach conjecture, Euler's phi-function.

Semester VI

SKILL ENHANCEMENT COURSE (SEC-4)

Course Name: Graph Theory

Course Code: BSCPMTMSE601

Course Type: SE	Course Details: SEC-4			L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

(After the completion of course, the students will have ability to):

- Appreciate the definition and basics of graphs along with types and their examples.
- Understand the Eulerian circuits, Eulerian graphs, Hamiltonian cycles, representation of a graph by matrix.
- Relate the graph theory to the real-world problems.

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF MICROBIOLOGY**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

Course Summary

Semester	Course Name		Course Type	Course Code	Course Details	Page No.
I	Microbial World and Principles of Microbiology		C	BSCHMCBC101	CC-1	3
	Bacteriology and Systematics			BSCHMCBC102	CC-2	4
	Generic Elective Courses		GE		GEC-1	
	Environmental Studies		AE	AEE101	AECC-1	
II	Basic Biochemistry		C	BSCHMCBC201	CC-3	9
	Microbial Techniques and Instruments			BSCHMCBC202	CC-4	11
	Generic Elective Courses		GE		GEC-2	
	English/MIL Communication		AE	See Pool	AECC-2	
III	Virology		C	BSCHMCBC301	CC-5	15
	Microbial Physiology and Metabolism			BSCHMCBC302	CC-6	16
	Cell and Molecular Biology			BSCHMCBC303	CC-7	18
	Generic Elective Courses		GE		GEC-3	
	Microbial Quality Control in Food & Pharmaceutical Industries	(Any One)	SE	BSCHMCBSE301	SEC-1	20
	Microbial Diagnostics and Public Health			BSCHMCBSE302		21
IV	Microbial Genetics		C	BSCHMCBC401	CC-8	24
	Environmental Microbiology and Microbial Ecology			BSCHMCBC402	CC-9	26
	Industrial Microbiology			BSCHMCBC403	CC-10	27
	Generic Elective Courses		GE		GEC-4	
	Food Fermentation Techniques	(Any One)	SE	BSCHMCBSE401	SEC-2	29
	Microbial Products			BSCHMCBSE402		30
V	Medical & Veterinary Microbiology and Immunology		C	BSCHMCBC501	CC-11	33
	Agriculture, Food and Dairy Microbiology			BSCHMCBC502	CC-12	35
	Biophysics, Biomathematics & Biostatistics	(Any Two)	DSE	BSCHMCBDSE501	DSEC-1 & DSEC-2	36
	Heredity and Evolution			BSCHMCBDSE502		37
	Microbial Biotechnology			BSCHMCBDSE503		39
VI	Advanced Microbiology		C	BSCHMCBC601	CC-13	41
	Recombinant DNA Technology			BSCHMCBC602	CC-14	42
	Project Work on Microbiology of Societal Importance	(Any Two)	DSE	BSCHMCBDSE601	DSEC-3 & DSEC-4	44
	Basic Computer and Bioinformatics			BSCHMCBDSE602		45
	Mycology and Phycology			BSCHMCBDSE603		46

Pool of Generic Elective Courses offered by Microbiology for other Disciplines					
Semester	Course Name	Course Type	Course Code	Course Details	Page No.
I	Microbial World and Diversity	GE	BSCHMCBGE101	GEC-1	6
II	Bacteriology and Virology		BSCHMCBGE201	GEC-2	12
III	Industrial and Food Microbiology		BSCHMCBGE301	GEC-3	22
IV	Genetic Engineering and Biotechnology		BSCHMCBGE401	GEC-4	31

Abbreviations: C= Core; CC=Core Course; AE= Ability Enhancement; AECC= Ability Enhancement Compulsory Course; GE= Generic Elective; GEC= Generic Elective Course; SE= Skill Enhancement; SEC= Skill Enhancement Course; DSE= Discipline Specific Elective; DSEC= Discipline Specific Elective Course; CA= Continuous Assessment, ESE= End Semester Examination, L= Lecture Hour; T= Tutorial Hour and P= Practical Hour/ Field Work and NA= Not Applicable

BSC HONOURS IN MICROBIOLOGY
LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK

Semester-I

Course Name: Microbial World and Principles of Microbiology
Course Code: BSCHMCBC101

Course Type: C	Course Details: CC-1			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: After the completion of this course, the students will –

1. Develop a good knowledge of the development of the discipline of Microbiology and the contributions made by prominent scientists in this field.
2. Develop a very good understanding of the characteristics of different types of microorganisms, methods to organize/classify these into and basic tools to study these in the laboratory.
3. Able to explain the useful and harmful activities of the microorganisms.
4. Able to perform basic experiments to grow and study microorganisms in the laboratory.

Course Name: Bacteriology and Systematics
Course Code: BSCHMCBC102

Course Type: C	Course Details: CC-2			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: At the completion of this course, the students will be able to –

1. Describe characteristics of bacterial cells, cell organelles, cell wall composition and various appendages like capsules, flagella or pili.
2. Differentiate a large number of common bacteria by their salient characteristics; classify bacteria into groups.
3. Describe the nutritional requirements of bacteria for growth; developed knowledge and understanding that besides common bacteria there are several other microbes which grow under extreme environments.
4. Perform basic laboratory experiments to study microorganisms; methods to preserve bacteria in the laboratory; calculate generation time of growing bacteria.

Course Name: Microbial World and Diversity
Course Code: BSCHMCBGE101

Course Type: GE	Course Details: GEC-1			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will -

1. Acquire a fairly good understanding of the Diversity of the microbes
2. Acquire a fairly good understanding of the activities/ importance of microbes.
3. Acquire practical skills of handling microorganisms in the laboratory for study.

Semester-II

Course Name: Basic Biochemistry
Course Code: BSCHMCBC201

Course Type: C	Course Details: CC-3			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the end of this course the students will -

1. Develop a very good understanding of various biomolecules which are required for development and functioning of a bacterial cell.
2. Understand how the carbohydrates make the structural and functional components such as energy generation and as storage food molecules for the bacterial cells
3. Conversant about multifarious function of proteins; are able to calculate enzyme activity and other quantitative and qualitative parameters of enzyme kinetics; also knowledge about lipids and nucleic acids.
4. Able to make buffers, study enzyme kinetics and calculate V_{max} , K_m , K_{cat} values.

Course Name: Microbial Techniques and Instruments
Course Code: BSCHMCBC202

Course Type: C	Course Details: CC-4			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the end of this course the students will -

1. Understand principles which underlies sterilization of culture media, glassware and plastic ware to be used for microbiological work.
2. Understand principles of a number of analytical instruments which the students have to use during the study and also later as microbiologists for performing various laboratory manipulations.
3. Learned handling and use of microscopes for the study of microorganisms which are among the basics skills expected from a practicing microbiologist. They also get introduced a variety of modifications in the microscopes for specialized viewing.
4. Understand several separation techniques which may be required to be handled by microbiologists.

Course Name: Bacteriology and Virology
Course Code: BSCHMCBGE201

Course Type: GE	Course Details: GEC2			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course learning outcomes: By the conclusion of this course, the students will -

1. Acquired a fairly good understanding of the different types of bacteria and viruses.
2. Acquired a fairly good understanding of the structure and other salient characteristics of bacteria and viruses.
3. Acquired skills of visualizing bacteria by staining, using a microscope and culturing bacteria in microbiological media to describe the features of bacterial colonies.

Semester-III

Course Name: Virology
Course Code: BSCHMCBC301

Course Type: C	Course Details: CC-5			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will -

1. Understood what are viruses and the chemical nature of viruses, different types of viruses infecting animals, plants and bacteria (bacteriophages)
2. Understand about the biology of bacteriophages.
3. Gained knowledge of a variety of plant viruses and animal viruses.
4. Gained ability to describe role of viruses in the causation of the cancer

Course Name: Microbial Physiology and Metabolism
Course Code: BSCHMCBC302

Course Type: ...C	Course Details: CC-6			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will be capable of-

1. Describing the growth characteristics of the microorganisms capable of growing under unusual environmental condition of temperature, oxygen, and solute and water activity.
2. Describing the growth characteristics of the microorganisms which require different nutrient for growth and the associated mechanisms of energy generation for their survival like autotrophs, heterotrophs, chemolithoautotrophs etc.
3. Differentiating concepts of aerobic and anaerobic respiration and how these are manifested in the form of different metabolic pathways in microorganisms.

Course Name: Cell and Molecular Biology
Course Code: BSCHMCBC303

Course Type: ...C	Course Details: CC-7			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will capable of –

1. Describing importance and mechanism of central dogma of life
2. Describing the structure and function of different components of cell.
3. Differentiating the cellular and molecular processes between prokaryotes and eukaryotes.

Course Name: Microbial Quality Control in Food & Pharmaceutical Industries

Course Code: BSCHMCBSE301

Course Type: SE	Course Details: SEC-1			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		--	10	--	40

Course learning outcomes: By the conclusion of this course, the students will -

1. Developed a very good understanding of practical aspects of microbiological safety, various detection methodologies and use of different microbiological media in food industries.
2. Developed a very good understanding of practical aspects of microbiological safety, various detection methodologies and toxicological testing of products in the pharmaceutical industries

Course Name: Microbial Diagnostics and Public Health

Course Code: BSCHMCBSE302

Course Type: SE	Course Details: SEC-1			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		--	10	--	40

Course learning outcomes: *By the conclusion of this course, the students will -*

- 1. Developed a very good understanding of practical aspects of collection of different clinical samples, their transport, culture and examination by staining, and molecular and immunological diagnostic methods for diagnosis of microbial diseases.*
- 2. Developed a very good understanding of practical aspects of antibiotic sensitivity testing, water and food testing skills using kits available in the market.*

Course Name: Industrial and Food Microbiology

Course Code: BSCHMCBGE301

Course Type: GE	Course Details: GEC-3			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course learning outcomes: *By the conclusion of this course, the students-*

- 1. Has acquired a fairly good knowledge of how microbes are used in the fermentative production of organic acids, alcohols, enzymes, antibiotics and various foods in the industry.*
- 2. Has acquired knowledge of various physical parameters which affect production of industrial products by the microorganisms and the safety aspects of the production and use of these products.*
- 3. Has developed laboratory skills in producing alcohol and enzymes by fermentative process using bacteria/yeast; Laboratory skills of testing microbial load in milk.*

Semester-IV

Course Name: Microbial Genetics
Course Code: BSCHMCBC401

Course Type: C	Course Details: CC-8			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will -

1. Understood genome organization of model organisms namely *E. coli* and *Saccharomyces*, and the molecular mechanisms that underlie mutations.
2. Developed a fairly good knowledge about the three well known mechanisms by which genetic material is transferred among the microorganisms namely transformation, transduction and conjugation.
3. Be able to describe different types of the extra-chromosomal elements or the plasmids; the nature of the transposable elements in the prokaryotic and the eukaryotic cells.
4. Gain hands on skills of isolation of plasmid DNA from bacterial cells and its visualization by performing agarose gel electrophoresis.

Course Name: Environmental Microbiology and Microbial Ecology
Course Code: BSCHMCBC402

Course Type: C	Course Details: CC-9			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the completion of this course, the students will -

1. Developed a fairly good knowledge and understanding of different types of environments and habitats where microorganisms grow including the microbiomes of the human gut and animal gut.
2. Be able to identify the important role microorganisms play in maintaining healthy environment by degradation of solid/liquid wastes; how these activities of microorganisms are used in sewage treatment plants, production of activated sludge and functioning of septic tanks
3. Understood the significance of BOD/ COD and various tests involving use of enumerating fecal *E. coli* for assessing quality of water.

4. Developed the practical skills for conducting experiments to assess the BOD/COD of waste waters and their interpretation; practically assess the portability of drinking water by the use of standard microbiological tests.

Course Name: Industrial Microbiology
Course Code: BSCHMCBC403

Course Type: C	Course Details: CC-10			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will -

1. Be capable of describing a large number of substrate that are used for the industrial fermentation processes.
2. Developed an understanding of different types of reactors or fermenters which are used for laboratory, pilot and industrial scale fermentations and their processes parameters.
3. Acquired a detailed knowledge of number of products which are produced by industrial fermentation processes.

Course Name: Food Fermentation Techniques
Course Code: BSCHMCBSE401

Course Type: SE	Course Details: SEC-2			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		0	10	0	40

Course Learning Outcomes: By the conclusion of this course, the students will -

1. Develop a very good understanding of practical aspects commercially produced food and fermentative products.
2. Develop a very good understanding of practical use of microbiology for better production of home-based food and fermentation products for day-to-day use

Course Name: Microbial Products
Course Code: BSCHMCBSE402

Course Type: SE	Course Details: SEC-2			L-T-P: 4 - 0 - 0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		0	10	0	40

Course Learning Outcomes: *By the conclusion of this course, the students-*

- 1. Have developed a very good understanding of practical aspects of production of bio fertilizers.*
- 2. Have developed a very good understanding of practical aspects of the production of bio pesticides/ bio insecticides.*

Course Name: Genetic Engineering and Biotechnology

Course Code: BSCHMCBGE401

Course Type: GE	Course Details: GEC8		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: *By the conclusion of this course, the students-*

- 1. Has acquired a fairly good knowledge of the tools and the methods for genetic engineering.*
- 2. Has acquired a fairly good understanding of how these tools and methods are employed in the laboratory for manipulation of DNA so as to make it relevant for biotechnological uses.*
- 3. Students can perform isolation of DNA, amplification of any gene by PCR and its analysis by gel electrophoresis.*

Semester-V

Course Name: Medical & Veterinary Microbiology and Immunology
Course Code: BSCHMCBC501

Course Type: C	Course Details: CC-11			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will clearly -

1. Understood the basic and general concepts of causation of disease by the pathogenic microorganisms and the various parameters of assessment of their severity including the broad categorization of the methods of diagnosis.
2. Develop a thorough understanding of common bacterial, viral, fungal, parasitic diseases of human being including some very important diseases of the animals also.
3. Conceptualized the protective role of the immune system of the host and developed an understanding of the basic components as well as the mechanisms underlying the immune system and its response to pathogenic microorganisms.
4. Able to conduct experiments for growing common bacteria in different microbiological media, antibiotic sensitivity determination and antigen antibody reaction (precipitation test in the agarose)

Course Name: Agriculture, Food and Dairy Microbiology
Course Code: BSCHMCBC502

Course Type: C	Course Details: CC-12			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students will clearly -

1. Develop a understanding of the multifarious roles of microorganisms in soil, in association with plants and thus in the field of agriculture.
2. Able to describe the role of microorganisms in the production of food, its spoilage, including their role in homemade fermented foods.
3. Able to identify the role of microorganisms in the causation of the diseases and how to protect against food-borne pathogens.
4. Develop experimental skills for testing the milk and different foods for the presence of microorganisms

Course Name: Biophysics, Biomathematics & Biostatistics
Course Code: BSCHMCBDSE501

Course Type: DSE	Course Details: DSEC-1 or 2		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students clearly-

1. Understand the basic physical parameters of cells or biological processes and basic methods used to study these.
2. Have developed basic knowledge of mathematics as applied to biological phenomenon.
3. Have developed basic concepts of statistics and their importance

Course Name: Heredity and Evolution
Course Code: BSCHMCBDSE502

Course Type: DSE	Course Details: DSEC-1 or 2		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students have -

1. Developed perception of evolution taking examples from well-studied models organisms of bacteria, fungi and other organisms.
2. Good understanding of concepts of Mendelian genetics and structural organizations of chromosomes.
3. Developed practical skills to do karyotyping and pedigree analysis

Course Name: Microbial Biotechnology
Course Code: BSCHMCBDSE503

Course Type: DSE	Course Details: DSEC-1 or 2		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students have -

1. Developed an understanding how microbiology is relevant to technological developments for agriculture and environment.
2. Developed an understanding how microbiology is relevant to technological developments for industries related to food and fermentations.

3. *Developed an understanding how developments in recombinant DNA technology is juxtaposed with microbially-based technological developments for agriculture, industry and environment.*

Semester-VI

Course Name: Advanced Microbiology
Course Code: BSCHMCBC601

Course Type: C	Course Details: CC-13			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: *By the conclusion of this course, the students will –*

1. *Explain salient characteristics of genomes of representative microorganisms.*
2. *Understood the concept and importance of metagenomics.*
3. *Develop an initial understanding of recent developments of host-microbe interactions, synthetic biology, viable but non-culturable forms of microorganism etc.*
4. *Able to extract DNA from bacteria / soil and perform PCR for 16s Ribosomal genes using universal primers and interpret the results.*

Course Name: Recombinant DNA Technology
Course Code: BSCHMCBC602

Course Type: C	Course Details: CC-14			L-T-P: 4 - 0 - 4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: *By the conclusion of this course, the students will -*

1. *Acquire a fairly good knowledge of the tools and the methods for genetic engineering.*
2. *Acquire a fairly good understanding of how these tools and methods are employed in the laboratory for manipulation of DNA so as to make it relevant for biotechnological uses.*
3. *Be able to perform isolation of DNA, amplification of any gene by PCR and its analysis by gel electrophoresis.*

Course Name: Project Work on Microbiology of Societal Importance
Course Code: BSCHMCBDSE601

Course Type: DSE	Course Details: DSEC-3 or 4		L-T-P: 0 - 0 - 12		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		60		40	

Course Learning Outcomes: By the conclusion of this course, the students-

1. Developed skills to design small project.
2. Should develop the habit of teamwork and perform experiments related to the project.
3. Developed basic skills for data retrieval, representation, analysis and interpretation.

Course Name: Basic Computer and Bioinformatics
Course Code: BSCHMCBDSE602

Course Type: DSE	Course Details: DSEC-3 or 4		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the conclusion of this course, the students-

1. Developed skills to use computers for analysis of biological data.
2. Skill to use important biological databases, use tools to retrieve data, and compare the data of the biological macromolecules
3. Developed basic skills for data retrieval, representation, analysis and interpretation

Course Name: Mycology and Phycology
Course Code: BSCHMCBDSE603

Course Type: DSE	Course Details: DSEC-3 or 4		L-T-P: 4 - 0 - 4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes: By the completion of this course the students able to-

1. Describe useful and harmful activities of fungi and algae.
2. Identify commonly available fungi and algae and their characteristics.
3. Discuss how fungi and algae are used as biofertilizers in agriculture and as biopesticides.
4. Grow mushroom in the laboratory.

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF PHYSICS

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BSc Honours in Physics
Course Learning Outcomes
Semester – I

Course Name: Mathematical Methods of Physics –I

Course Code: BSCHPHSC101

Course Type: Core(Theoretical)	Course Details:CC-1			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Enrich themselves with analytical tools needed for further studies in physics, like basic linear algebra, vector algebra and calculus, solutions of ordinary and partial differential equations, probability distributions, determinant and non-singular matrices.*
- 2. Apply the techniques for solving different problems related to probability, differential equations, integral transform and linear algebra.*

Course Name: Mechanics

Course Code: BSCHPHSC102

Course Type: Core(Theory and Practical)	Course Details: CC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand classical mechanics of single as well as system of particles within the scope Newtonian formulation.*

2. Explain general properties of bulk matter and different types of simple harmonic linear oscillations.

Semester – II

Course Name: Mathematical Methods of Physics-II

Course Code: BSCHPHSC201

Course Type: Core (Theory & Practical)	Course Details: CC-3			L-T-P: 4-0-4	
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Work with (i) different properties of special functions, useful in other branches of Physics; (ii) Fourier expansion of analytic functions; (iii) properties of complex variables and their integrals; (iv) standard integrals.
2. Do computer programming using C /C++, aiming for basic mathematical problems as well as on problems based on standard numerical analysis.

Course Name: Electricity and Magnetism

Course Code: BSCHPHSC202

Course Type: Core (Theory & Practical)	Course Details: CC-4			L-T-P: 4-0-4	
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Discuss the properties of (i) the produced electric field due to charges at rest; (ii) the

produced magnetic field due to steady, both in free-space and inside matter.

- 2. Explain the idea of electromagnetism, through Maxwell's equation.*
- 3. Analysis of electrical networks and bridges in presence of alternating currents.*

Semester-III

Course Name: Classical Mechanics and Special Theory of Relativity

Course Code: BSCHPHSC301

Course Type: Core (Theory)	Course Details: CC-5			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Explain the classical mechanics of rotating systems and particle under central force.*
- 2. Understand the Lagrangian and Hamiltonian formulations of classical mechanics.*
- 3. Explain the necessity of replacing Newtonian relativity through Einstein's special relativity, and elaborate on the classical mechanics of fast particles under the special relativity.*

Course Name: Thermal Physics – I

Course Code: BSCHPHSC302

Course Type: Core(Theory & Practical)	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Demonstrate molecular motion (kinetics) inside an ideal and a real classical gas.*
- 2. Explain how the processes of heat transfer through solid, viz., conduction and radiation*

Course Name: Analog Systems and Applications**Course Code: BSCHPHSC303**

Course Type: Core (Theory & Practical)	Course Details: CC-7			L-T-P: 4-0-4	
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Explain the electronic transport mechanisms through intrinsic and extrinsic semiconductors.*
2. *Understand the theory of the transport through doped semiconductor junctions in diodes, transistors.*
3. *Use diode as rectifier and junction transistors as amplifiers.*

SKILL ENHANCEMENT COURSE (SEC-I)**Course Name: Electrical Circuit Network Skills****Course Code: BSCHPHSSEC 301**

Course Type: SEC (Practical)	Course Details: SEC-1			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Design and trouble shoots the electrical circuits, networks and appliances through hands-on mode.*
2. *Choose proper devices depending upon application considering economic and technology up gradation.*

Course Name: Technical Drawing Skills**Course Code: BSCHPHSSEC302**

Course Type: SEC (Practical)	Course Details: SEC-1			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Know and understand the conventions and the method of engineering drawing.*
2. *Interpret engineering drawings using fundamental technical mathematics.*
3. *Construct basic and intermediate geometry.*
4. *Improve their visualization skills so that they can apply the skill in developing new products.*
5. *Improve their technical communication skill in the form of communicative drawings.*
6. *Comprehend the theory of projection.*

Semester-IV**Course Name: Electromagnetic Theory****Course Code: BSCHPHSC401**

Course Type: Core (Theory)	Course Details: CC-8			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Demonstrates the theory behind the generation of the electromagnetic (transverse) progressive wave in combination of oscillating electric and magnetic fields.*
2. *Understand the basics of electromagnetic wave and its propagation through conducting and non-conducting medium and their application in modern day communication system.*
3. *Understand the theories of the manifestations by EM wave (viz., dispersion, scattering, polarization).*

Course Name: Waves and Optics**Course Code: BSCHPHSC402**

Course Type: Core(Theory & Practical)	Course Details: CC-9		L-T-P: 4-0-4		
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Explain linear superposition of several collinear and mutually perpendicular SHMs.*
- 2. Grow understanding due to manifestations by the optical (light) waves (viz., interference, diffraction and polarisation) can be made.*
- 3. Apply knowledge of sound waves, and light waves to explain natural physical processes and related technological advances.*

Course Name: Digital Systems and Applications**Course Code: BSCHPHSC 403**

Course Type: Core(Theory & Practical)	Course Details: CC-10		L-T-P: 4-0-4		
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Work with binary logic, and thus know how different kinds of logic gates work.*
- 2. Develop a digital logic and apply it to solve real life problems.*
- 3. Understand the difference between combinational and sequential logic circuits.*
- 4. Analyze, design and implement combinational and sequential logic circuits.*
- 5. Gain knowledge how modern day computer works.*

SKILL ENHANCEMENT COURSE

Course Name: Basic Instrumentation Skills

Course Code: BSCHPHSSEC401

Course Type: SEC (Practical)	Course Details: SEC-2			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Get exposure with various aspects of instruments and their usage through hands-on mode.*
- 2. Do experiments listed below in continuation of the topics*

Course Name: Computational Physics

Course Code: BSCHPHSSEC402

Course Type: SEC (Practical)	Course Details: SEC-2			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Use computer programming language FORTRAN for solving the problems in physics through programming.*
- 2. Prepare manuscript for scientific publication using Latex.*
- 3. Visualize numerical data using Gnuplot software.*

Semester – V

Course Name: Quantum Mechanics

Course Code: BSCHPHSC501

Course Type: Core (Theory & Practical)	Course Details: CC-11			L-T-P: 4-0-4	
Credit: 6	FullMarks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Explain the failures of classical theory in explaining different experiments of early twentieth century are discussed.*
- 2. Understand ideas of wave-particle duality, matter-wave.*
- 3. Explain how the importance of Schrodinger equation (time-dependent and time-independent) to demonstrate solutions of some systems for different proto-type potentials (1d and 3d) .*
- 4. Understand the concepts of quantum (Hermitian) operators and basis vectors.*

Course Name: Thermal Physics II

Course Code: BSCHPHSSC502

Course Type: Core(Theory)	Course Details: CC-12			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Demonstrate a mastery of the core knowledge in the areas of Thermal Physics.*
- 2. Explain the concept of thermodynamic as an empirical description for the thermal properties of a macroscopic system.*
- 3. Understand the applications of thermodynamics and the theory of the phase-transitions are discussed.*

Discipline Specific Elective (DSE I & II)

Course Name: Nuclear and Particle Physics

Course Code: BSCHPHSDSE501

Course Type: DSEC(Theory)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Explain structure and properties of nuclei, the mechanism of different radioactive decays and their applications in peaceful use of nuclear energy.*
2. *Understand what are the elementary particles that constitute this known universe.*
3. *Gather capability of elementary problem solving in nuclear and particle physics.*

Course Name: Communication Electronics

Course Code: BSCHPHSDSE502

Course Type: DSEC (Theory)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Get familiar with different types of communication systems used in electronics.*
2. *Understand information theory and coding techniques. They will get knowledge about principle of Radar, satellite and mobile communication system.*

Course Name: Atomic Physics & Spectroscopy**Course Code: BSCHPHSDSE503**

Course Type: DSEC(Theory)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand the concepts of atomic spectra and its origin using the old quantum theory whose consistency can be later verified by the direct application of the quantum mechanics.*
- 2. Account for theoretical models, terminology & working methods used in atomic and molecular physics.*
- 3. Carry out experimental and theoretical studies on atomic and molecular physics with focus on structure and dynamics of atoms and molecules.*

Course Name: Astronomy & Astrophysics**Course Code: BSCHPHSDSE504**

Course Type: DSEC(Theory)	Course Details: DSEC1&2			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Learn how to unravel the secrets of the Universe applying basic physical principles from a broad range of topics in physics to astronomical circumstances.*
- 2. Understand the astrophysical processes and systems, ranging from our own sun to stars, galaxies and the whole universe.*
- 3. Use proficiency in physics, mathematics, computer science, and statistics to get a broader understanding of the universe*

Semester -VI

Course Name: Statistical Mechanics

Course Code: BSCHPHSC601

Course Type: Core(Theory)	Course Details: CC-13			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Understand how probability theory can be used to derive relations between the microscopic and macroscopic properties of matter.*
2. *Understand classical and quantum statistics and their application in different systems enable students to develop knowledge about how Bosonic and Fermionic systems behave.*
3. *Realize how electrons behave in metals and semiconductors, and photons in blackbody radiations or phonons in solids.*

Course Name: Condensed Matter Physics

Course Code: BSCHPHSC602

Course Type: Core(Theory)	Course Details: CC-14			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Understand the lattice structure in crystalline solids and their different properties (viz., dielectric, magnetic, electrical transport).*
2. *Explain elementary idea on superconductivity.*

Discipline Specific Elective (DSE III & IV)**Course Name: Applied Optics****Course Code: BSCHPHSDSE601**

Course Type: DSEC	Course Details: DSEC3&4		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Understand the geometrical / ray optics through transfer matrix-formalism*
2. *Acquire basic knowledge on different types of optical phenomena*
3. *Realize the technological applications of optical phenomena as a background of the fiber optics, holography, LASER and photo-detectors.*
4. *Analyze different laser systems and its applications in various fields.*
5. *Conceptualize optical fiber, its construction and importance in communication physics.*

Course Name: Physics of Devices and Instruments**Course Code: BSCHPHSDSE602**

Course Type: DSEC(Theory)	Course Details: DSEC3&4		L-T-P: 5-1-0		
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Get exposure with various aspects of instruments and their usage through hands-on mode.*
2. *Analyze the performance characteristics of different electronic devices.*
3. *Understand the concepts of Communication Systems effectively.*

Course Name: Classical Dynamics**Course Code: BSCHPHSDSE603**

Course Type: DSEC(Theory)	Course Details: DSEC3&4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Understand how the formulation of the Lagrangian and Hamiltonian mechanics comes through the calculus of variation.*
2. *Get idea how small oscillations of isolated and coupled systems are studied through normal modes.*
3. *Understand how the formulation of (special) relativistic mechanics comes through four-vectors and Minkowski cone.*

Course Name: Nanomaterials and Applications**Course Code: BSCHPHSDSE604**

Course Type: DSEC (Theory)	Course Details: DSEC3&4			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Gain experience in applying unique properties of nanomaterials to solve problems and challenges in our life.*
2. *Demonstrate the ability to develop case studies of nanomaterials with a focus on fundamentals, fabrication, characterization, and applications.*
3. *Gather knowledge about synthesis, characterization and applications of nanomaterials.*
4. *Collect information about optical, electrical and mechanical properties of the nanomaterials.*

GENERIC ELECTIVE COURSES

Course Learning Outcomes

Semester-I

Course Name: Mechanics

Course Code: BSCHPHSGE101

Course Type: Core (Theory& Practical)	Course Details: GE-I			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand vector calculus, classical mechanics of single as well as system of particles within the scope the Newtonian formulation.*
- 2. Describe general properties of bulk matter and different types of simple harmonic linear oscillations.*
- 3. Discuss classical mechanics of rotating systems and particle under central force.*
- 4. Introduce Einstein's special theory of relativity and the classical mechanics of fast moving particles.*

Semester-II

Course Name: Electricity and Magnetism

Course Code: BSCHPHSGE201

Course Type: Core (Theory & Practical))	Course Details: GE-II			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Explain the properties of (i) the electric field produced due to charges at rest; (ii) the magnetic field produced due to steady current, both in free-space and inside matter.*

- Describe the basic idea of electromagnetism, through Maxwell's equation, hence the generation of EM waves.

Semester- III

Course Name: Fundamentals of Thermal and Statistical Physics

Course Code: BSCHPHSGE301

Course Type: Core(Theory & Practical)	Course Details: GE-II			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- Realize the kinetic theory of ideal classical gas.
- Explain radiative process of heat transfer
- Understand the laws of thermodynamics and their applications in simple system.
- Introduce (i) classical (MB) and quantum (BE, FD) distributions as most-probable micro-canonical distributions; (ii) different thermodynamic quantities (viz., entropy, pressure, chemical potential etc.) (iii) black-body radiation and BE condensation.

Semester-IV

Course Name: Fundamentals of Waves and Optics

Course Code: BSCHPHSGE401

Course Type: Core (Theory & Practical)	Course Details: GE-IV			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- Find the resultant of two collinear and mutually perpendicular SHMs and, explain progressive elastic wave.
- Understand the manifestations of optical wave (viz., interference, diffraction and polarisation).

BSC PROGRAM IN PHYSICS
COURSE LEARNING OUTCOMES

Semester – I

Course Name: Mechanics

Course Code: BSCPPHSC101

Course Type: Core (Theory& Practical)	Course Details: CC-1(1)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand vector calculus, classical mechanics of single as well as system of particles within the scope Newtonian formulation.*
- 2. Describe general properties of bulk matter and different types of simple harmonic linear oscillations.*
- 3. Discuss classical mechanics of rotating systems and particle under central force.*
- 4. Introduce Einstein's special theory of relativity and the classical mechanics of fast moving particles.*

Semester – II

Course Name: Electricity and Magnetism

Course Code: BSCPPHSC201

Course Type: Core (Theory & Practical))	Course Details: CC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Explain the properties of (i) the electric field produced due to charges at rest; (ii) the magnetic field produced due to steady current, both in free-space and inside matter.*
- 2. Describe the basic idea of electromagnetism, through Maxwell's equation, hence the*

generation of EM waves.

3. Describes on the electrical circuits and bridges in presence of AC current.

Semester - III

Course Name: Basics of Thermal and Statistical Physics

Course Code: BSCPPHSC301

Course Type: Core(Theory & Practical)	Course Details: CC-1(3)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Realize the kinetic theory of ideal classical gas.
2. Explain radiative process of heat transfer
3. Understand the laws of thermodynamics and their applications in simple system.
4. Introduce (i) classical (MB) and quantum (BE, FD) distributions as most-probable micro-canonical distributions; (ii) different thermodynamic quantities (viz., entropy, pressure, chemical potential etc.) (iii) black-body radiation and BE condensation.

SKILL ENHANCEMENT COURSE

Course Name: Electrical Circuit Network Skills

Course Code: BSCPPHSSEC301

Course Type: SEC (Practical)	Course Details: SEC-1			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Design and trouble shoots the electrical circuits, networks and appliances through hands-on mode.
2. Analyze any given electrical network.
3. Synthesize an electrical network from a given impedance/admittance function.

Semester - IV**Course Name: Basics of Waves and Optics****Course Code: BSCPPHSC401**

Course Type: Core (Theory & Practical)	Course Details: CC-1(4)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:*After the completion of course, the students will have ability to:*

1. Find the resultant of two collinear and mutually perpendicular SHMs and, explain progressive elastic wave.
2. Understand the manifestations of optical wave (viz., interference, diffraction and polarisation).

SKILL ENHANCEMENT COURSE**Course Name: Basic Instrumentation Skills****Course Code: BSCPPHSSEC401**

Course Type: SEC (Practical)	Course Details: SEC-II			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:*After the completion of course, the students will have ability to:*

1. Get exposure with various aspects of instruments and their usage through hands-on mode.
2. Do experiments listed below in continuation of the topics.

Semester-V**DISCIPLINE SPECIFIC ELECTIVE (DSE)****Course Name: Modern Physics****Course Code: BSCPPHSDSE501**

Course Type: DSE-I (Theory)	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:*After the completion of course, the students will have ability to:*

1. Understand the root in the development of modern physics
2. Understand the relationship between the real and reciprocal space and learn the Bragg's X-ray diffraction in crystals
3. Gain a hands-on learning experience by performing experiments on these properties of materials.
4. Describe the behavior of matter and energy at atomic and subatomic level

Course Name: Astronomy & Astrophysics**Course Code: BSCPPHSDSE502**

Course Type: DSE-I(Theory)	Course Details: DSEC-1(1)			L-T-P: 5-1-0	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		.....	10	.....	40

Course Learning Outcomes:*After the completion of course, the students will have ability to:*

4. Learn how to unravel the secrets of the Universe applying basic physical principles from a broad range of topics in physics to astronomical circumstances.
5. Understand the astrophysical processes and systems, ranging from our own sun to stars, galaxies and the whole universe.
6. Use proficiency in physics, mathematics, computer science, and statistics to get a broader understanding of the universe.

Course Name: Technical Drawing Skills**Course Code: BSCPPHSSEC501**

Course Type: SEC (Practical)	Course Details: SEC-III			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 7. Know and understand the conventions and the method of engineering drawing.*
- 8. Interpret engineering drawings using fundamental technical mathematics.*
- 9. Construct basic and intermediate geometry.*
- 10. Improve their visualization skills so that they can apply the skill in developing new products.*
- 11. Improve their technical communication skill in the form of communicative drawings.*
- 12. Comprehend the theory of projection.*

Semester-VI**Course Name: Basic Electronics****Course Code: BSCPPHSDSE601**

Course Type: DSE-II(Theory & Practical)	Course Details: DSEC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand both in analog and digital electronics.*
- 2. Design several electronic devices thorough the knowledge on electronic circuit, semiconductor and its properties.*

Course Name: Nanomaterials and Applications**Course Code: BSCPPHSDSE602**

Course Type: DSEII (Theory & Practical)	Course Details: DSEC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

Course Learning Outcomes:

After the completion of course, the students will have ability to:

5. *Gain experience in applying unique properties of nanomaterials to solve problems and challenges in our life.*
6. *Develop case studies of nanomaterials with a focus on fundamentals, fabrication, characterization, and applications.*
7. *Gather knowledge about synthesis, characterization and applications of nanomaterials.*
8. *Collect knowledge about optical, electrical and mechanical properties of the nanomaterials.*

SKILL ENHANCEMENT COURSE**Course Name: Computational Physics****Course Code: BSCPPHSSEC601**

Course Type: SEC(Practical)	Course Details: SEC-IV			L-T-P: 0-0-8	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Use computer programming language FORTRAN for solving the problems in physics through programming.*
2. *Prepare manuscript for scientific publication using Latex.*
3. *Visualize numerical data using Gnuplot software.*

**RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF PSYCHOLOGY**

**COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK (LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY**

B.SC. (HONS) IN PSYCHOLOGY

COURSE LEARNING OUTCOMES

SEMESTER I

BSCHPSYC101: INTRODUCTION TO PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- To provide solid foundation to the basic concepts of the field of psychology with an emphasis on applications of psychology in everyday life.
- Appreciation of the scope and the field of psychology.
- Developing familiarity with basic concepts related to some foundational themes of study in psychology such as learning, memory, perception, and thinking.
- To help the students develop a scientific temperament in studying and understanding human behaviour.

BSCHPSYC102: BIOPSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Understanding the biological bases of human behaviour, its nature and scope
- Developing critical thinking to use scientific techniques for biological psychology and developing an awareness of ethical issues accompanying them
- Having basic knowledge about the structures of human brain, their functions and impact on human behaviour
- Realizing the importance of hormones in behaviour, cognition and emotions

SEMESTER-II

BSCHPSYC201: PSYCHOLOGY OF INDIVIDUAL DIFFERENCES

COURSE LEARNING OUTCOMES:

- To develop an understanding of the concept of individual differences
- To acquaint the learner with the complexities of personality theories
- To help students gain ideas about intelligence and personality as foundations of human empowerment.
- Understanding the various approaches to Intelligence and appreciation of the diverse frameworks
- To know the processes and principles of motivation and emotion and appreciating the diverse frameworks

BSCHPSYC202: PSYCHOLOGICAL RESEARCH

COURSE LEARNING OUTCOMES:

- Awareness of the basic features of various types of research undertaken with human beings and understanding of the use of basic terminology used in human research.
- Demonstrate ability to plan simple researches and state its requirements.
- Developing familiarity with different kinds of measures and techniques for assessing individual differences.
- Understanding the distinctive features of a select qualitative research methods and plan small qualitative research.
- To provide an overview of scientific approaches to psychological research in term of sampling techniques, scientific method, and experimental designs.
- To educate students with the process and the methods of quantitative and qualitative psychological research traditions.

SEMESTER-III

BSCHPSYC301: STATISTICAL METHODS FOR PSYCHOLOGICAL RESEARCH-I

COURSE LEARNING OUTCOMES:

- To help students develop knowledge and understanding of the application of Statistics within Psychology.
- To help students develop critical thinking for application of appropriate statistical analysis in Psychological research
- To foster an understanding of the techniques of descriptive statistics for quantitative research.
- To teach the application of the same in the field of Psychology

BSCHPSYC302: HISTORY OF MAJOR PSYCHOLOGICAL PERSPECTIVES

COURSE LEARNING OUTCOMES:

- Building an understanding of pre-history and history of psychology, including philosophical and general-scientific milestone events that have influenced the development of the discipline
- Identifying and appreciating the diversity of contributions to the contemporary fields of psychology
- Developing critical thinking skills with increased ability to articulate sound arguments and ask sophisticated questions regarding theories and principles of psychology
- Describe the key figures in the history of psychology and their major contributions and perspectives
- Provide an introduction to the development of the discipline both from the Indian as well as Western perspective

BSCHPSYC303: SOCIAL PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Understanding the basic social psychological concepts and familiarize with relevant methods.
- Developing skills pertaining to mapping of social reality and understanding how people evaluate social situations.
- Developing an understanding pertaining to social influence processes particularly the influence of others on individual behaviour and performance.
- Develop an understanding of the individual in relation to the social world

BSCHPSYSE301: EMOTIONAL INTELLIGENCE

COURSE LEARNING OUTCOMES:

- To understand the theoretical concept of emotional intelligence and its various models
- To foster the ability to identify and manage one's own emotions, as well as the emotions of others
- Help students deal with negative emotional states and promote more positive emotions in its place
- To understand the application of emotional intelligence in myriad settings, such as the workplace, relationships, etc.
- To understand the concept of emotional intelligence and learn ways of developing it.

SEMESTER-IV

BSCHPSYC401: STATISTICAL METHODS FOR PSYCHOLOGICAL RESEARCH-II

COURSE LEARNING OUTCOMES:

- Developing an understanding of the nature of qualitative and quantitative inquiry
- To educate students with the techniques of inferential statistics and hypothesis testing
- Developing a basic knowledge of how to analyze data quantitatively
- To educate students with the techniques of inferential statistics and hypothesis testing.

BSCHPSYC402: DEVELOPMENTAL PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Demonstrating an ability to understand and distinguish major theoretical perspectives and methodological approaches in human development.
- Developing an ability to identify the milestones in diverse domains of human development across life stages.
- Understanding the contributions of socio-cultural context toward shaping human development.

BSCHPSYC403: APPLIED SOCIAL PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Understanding the key issues and theoretical concepts related to social inequalities, especially in the Indian context.
- Developing insights into one's own behaviours as a man (or as a woman) through self reflexivity.
- Learning to apply theoretical knowledge of social psychology in designing intervention systems.
- Developing insights into issues related to groups, environment and the legal system.

BSCHPSYSE401: EFFECTIVE DECISION MAKING

COURSE LEARNING OUTCOMES:

- To learn decision making skills.
- To develop an understanding into the choices that one has about one's career.
- To promote skills pertaining to interpersonal relationships, conflict resolution and negotiations.
- To develop skills enhancing competency at work.

SEMESTER-V

BSCHPSYC501: Understanding Psychological Disorders

COURSE LEARNING OUTCOMES:

- Acquiring knowledge and skills for distinguishing normal and abnormal behaviour and learn the criteria of determining abnormality.
- Developing familiarity with the current diagnostic systems (current edition of the Diagnostic and Statistical Manual of Mental Disorders and International Classification of Diseases- Mental Disorder section).
- Acquiring knowledge about Anxiety Disorders and Trauma & Stressor-related, Dissociative and Personality Disorders.
- Developing sensitivity towards individual and cultural diversity.

BSCHPSYC502: ORGANIZATIONAL BEHAVIOUR

COURSE LEARNING OUTCOMES:

- To develop an awareness of the concepts related to organizational behaviour.
- Help the students develop a connection between concepts and practices of organizations.
- Understanding the evolution of the field of organizational behaviour and the challenges faced by the field today, for instance diversity, corporate social responsibility, etc.
- Developing a deeper understanding of conceptual and theoretical bases of motivation and employees' work attitudes and their relationship with performance and organizational outcomes.

- Understanding leadership processes from different theoretical perspectives.

SEMESTER-VI

BSCHPSYC601: UNDERSTANDING AND DEALING WITH PSYCHOLOGICAL DISORDERS

COURSE LEARNING OUTCOMES:

- To introduce the etiological understanding and therapeutic interventions for the various psychological disorders.
- Develop an understanding of Mood disorders
- To introduce personality disorders and Schizophrenia.

BSCHPSYC602: COUNSELING PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- To develop an understanding of basic concepts, processes, and techniques of Counselling.
- Having a comprehensive understanding of the profession of counselling, particularly in the Indian context.
- Acquiring basic counselling skills of problem identification, and relationship building (e.g. empathy, listening, paraphrasing, unconditional positive regard).
- Developing qualities of an effective counsellor including increasing self-awareness, reflexivity, self-monitoring and objectivity.
- Helping clients having mild concerns in life; for instance acting as peer counsellors in the college/community.

DISCIPLINE SPECIFIC ELECTIVES

BSCHPSYDSE501: POSITIVE PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Appreciating and understanding the meaning and conceptual approaches to positive psychology.
- Being able to understand the how positive emotional states contribute to resilience, happiness, and wellbeing.
- Learning the various pathways through which cognitive states and processes influence self-efficacy, optimism and wellbeing.
- Being able to identify the applications of positive psychology.

BSCHPSYDSE502: HEALTH PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Understanding health psychology and the relation between mind and body.
- Identifying the characteristics of healthy behaviours and promoting them.
- Understanding a variety of health enhancing behaviours and the importance of exercise, nutrition, safety and management of pain and stress.
- Developing an understanding of pursuing research in health psychology domains and developing interventions.

BSCHPSYDSE601: COMMUNITY PSYCHOLOGY

COURSE LEARNING OUTCOMES:

- Understanding the role of Psychology in community development.
- Developing an appreciation of the core values that guide community psychology and facilitate community functions.
- To understand the link between individuals and communities and deal with social issues more effectively.
- Developing insights with respect to health promotion programs in communities, community programme for child and maternal health, for physically challenged and elderly people in the Indian context, through case studies.

BSCHPSYDSE602: PROJECT/ DISSERTATION

COURSE LEARNING OUTCOMES:

- Conceptualizing a research problem based on the basic and applied orientation of research.
- Executing a research plan through systematic application of knowledge about appropriate sampling, suitable research designs, relevant research tools, standardized conduction, accurate data analysis techniques and adhering to ethical guidelines.
- Reporting research outcomes in a standardised, universally acceptable and comprehensible format.
- Gaining insights about the domain researched and critically reflecting on the steps of the research process.

RANIGANJ GIRLS' COLLEGE
DEPARTMENT OF ZOOLOGY

COURSE LEARNING OUTCOMES
LEARNING OUTCOME BASED CURRICULUM FRAMEWORK
(LOCF)
UNDER THE
CHOICE BASED CREDIT SYSTEM (CBCS)
OF
KAZI NAZRUL UNIVERSITY

BSC HONOURS IN ZOOLOGY
COURSE LEARNING OUTCOMES
SEMESTER – I

Course Name: Systematics & Diversity of Life - Protists to Chordates

Course Code: BSCHZOOC101

Course Type: Core (Theoretical & Practical)	Course Details: CC-1			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course is a walk for the Bachelor's entrant through the amazing diversity of living forms from simple to complex one. It enlightens how each group of organisms arose and how did they establish themselves in the environment with their special characteristics. It also deals with the differences and similarities between organisms on the basis of their morphology and anatomy which led to their grouping into taxa and clades.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop understanding on the diversity of life with regard to protists, non-chordates and chordates.
- Group animals on the basis of their morphological characteristics / structures.
- Develop critical understanding how animals changed from a primitive cell to a collection of simple cells to form a complex body plan.
- Examine the diversity and evolutionary history of a taxon through the construction of a basic phylogenetic/ cladistics tree.
- Understand how morphological change due to change in environment helps drive evolution over a long period of time.
- The project assignment will also give them a flavour of research to find the process involved in studying biodiversity and taxonomy besides improving their writing skills.
- It will further enable the students to think and interpret individually due to different animal species chosen

Course Name: Ecology
Course Code: BSCHZOOC102

Course Type: Core (Theoretical & Practical)	Course Details: CC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

This course will take students on a journey through the physical workings of the Earth, the interactions between species and their environments. The course highlights on some of the important aspects viz. growth and survival of populations and communities in different habitats, energy flow in the ecosystems, interactions between the communities, exclusion of niches and consequences of changing environment on the biodiversity.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Know the evolutionary and functional basis of animal ecology.
- Understand what makes the scientific study of animal ecology a crucial and exciting endeavour.
- Engage in field-based research activities to understand well the theoretical aspects taught besides learning techniques for gathering data in the field.
- Analyse a biological problem, derive testable hypotheses and then design experiments and put the tests into practice.
- Solve the environmental problems involving interaction of humans and natural systems at local or global level.

SEMESTER – II

Course Name: Comparative Anatomy & Physiology of Nonchordates

Course Code: BSCHZOOC201

Course Type: Core (Theoretical & Practical)	Course Details: CC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course makes a detailed comparison of the anatomy of the different taxa of non-chordates. It also highlights how in the taxonomic hierarchy, there is an increase in-the complexity of structure and function. The course thus gives an overview of the intricate life processes and adaptive radiations in non-chordates.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop an understanding of the characters used to classify besides being able to differentiate the organisms belonging to different taxa.
- Acquire knowledge of the coordinated functioning of complex human body machine.
- Have hands on experience of materials demonstrating the diversity of protists and non-chordates.
- Understand the relative position of individual organs and associated structures through dissection of the invertebrate representatives.
- Realize that very similar physiological mechanisms are used in very diverse organisms.
- Get a flavor of research by working on project besides improving their writing skills. It will further enable the students to think and interpret individually.
- Undertake research in any aspect of animal physiology in future.

Course Name: Cell Biology and Histology

Course Code: BSCHZOOC202

Course Type: Core (Theoretical & Practical)	Course Details: CC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides a detailed insight into basic concepts of cellular structure and function. It also gives an account of the complex regulatory mechanisms that control cell function.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand the functioning of nucleus and extra nuclear organelles and understand the intricate cellular mechanisms involved.
- Acquire the detailed knowledge of different pathways related to cell signalling and apoptosis thus enabling them to understand the anomalies in cancer.
- Develop an understanding how cells work in healthy and diseased states and to give a 'health forecast' by analyzing the genetic database and cell information.
- Get new avenues of joining research in areas such as genetic engineering of cells, cloning, vaccines development, human fertility programme, organ transplant, etc.
- Understand how tissues are produced from cells in a normal course and about any malfunctioning which may lead to benign or malignant tumor.

SEMESTER – III

Course Name: Comparative Anatomy & Physiology of Chordates

Course Code: BSCHZOOC301

Course Type: Core (Theoretical & Practical)	Course Details: CC-5			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course offers insight into the physiology of chordates while giving an account of their anatomy. This course also explores vertebrate morphology with the aims of understanding major events in the history of vertebrate evolution and integrating the morphology of vertebrates with their ecology, behaviour and physiological adaptation in diverse habitats. Thermal relations encountered in endo- and ectothermic animals will be explained. Selective pressures that shape to different physiological phenotypes will also be addressed in the course.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop an understanding of the evolution of vertebrates thus integrating structure, function and development.
- Have an overview of the evolutionary concepts including homology and homoplasy, and detailed discussions of major organ systems.
- Understand how cells, tissues, and organisms function at different levels. The course content also provides the basis of understanding their abnormal function in animal and human diseases and new methods for treating those diseases.
- Develop an understanding of the related disciplines, such as cell biology, neurophysiology, pharmacology, biochemistry etc.
- Get a flavor of research besides improving their writing skills and making them well versed with the current trends. It will further enable the students to think and interpret individually due to different aspects chosen.
- Undertake research in any aspect of animal physiology in future.

Course Name: Genetics
Course Code: BSCHZOOC302

Course Type: Core (Theoretical & Practical)	Course Details: CC-6			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course is designed to revise basic concepts of Genetics and then move on to advanced concepts. Some key aspects include the mechanism of inheritance, gene structure and function, sex chromosomal and autosomal anomalies, aspects of human genetics, etc. will be covered. A strong emphasis will be laid on the modern tools and techniques used in genetics.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand how DNA encodes genetic information and the function of mRNA and tRNA.
- Apply the principles of Mendelian inheritance.
- Understand the cause and effect of alterations in chromosome number and structure.
- Relate the conventional and molecular methods for gene manipulation in other biological systems.
- Discuss and analyse the epigenetic modifications and imprinting and its role in diseases.
- Get new avenues of joining research in related areas such as genetic engineering of cells, cloning, genetic disorders, human fertility programme, genotoxicity, etc

Course Name: Biochemistry
Course Code: BSCHZOOC303

Course Type: Core (Theoretical & Practical)	Course Details: CC-7			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides an introduction to the structure of biomolecules with emphasis on the techniques used for structure determination and analysis. The course covers basic aspects of sample preparation for analysis and aims to enlighten the students how structural information can be utilized for better understanding of biological processes.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand about the importance and scope of biochemistry.
- Understand the structure and biological significance of carbohydrates, amino acids, proteins, lipids and nucleic acids.
- Understand the structure and function of immunoglobulins.
- Understand the concept of enzyme, its mechanism of action and regulation.
- Understand the process of DNA replication, transcription and translation.
- Learn the preparation of models of peptides and nucleotides.
- Learn biochemical tests for amino acids, carbohydrates, proteins and nucleic acids.
- Learn measurement of enzyme activity and its kinetics.

Course Name: Beekeeping
Course Code: BSCHZOOSE301

Course Type: SE (Theoretical)	Course Details: SEC-1		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

This course tells the students what tools and equipment will be needed, the main activities in the beekeepers year, the laws and by laws governing keeping bees; discover the principles of sustainable beekeeping and how these principles can guide your Beekeeping into an enduring practice.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Explain what are the prerequisite to get started in beekeeping.
- Describe the laws around beekeeping in Vancouver.
- Discuss the responsibilities of urban beekeepers.
- Identify where to purchase equipment and demonstrate how to assemble it.
- Name and identify major parts of the honeybee such as the stinger or mandibular parts.
- Describe bee biology and anatomy from the perspective of managing bees.
- Describe the importance of wax and identify what to look for in comb during hive inspections.

Course Name: Public Health and Hygiene
Course Code: BSCHZOOSE302

Course Type: SE (Theoretical)	Course Details: SEC-1		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

The course designed for public health and hygiene at graduation level will give understanding for health hygiene, dietary issues, diseases related to malnutrition, communicable and non-communicable diseases.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Identify current national and global public health problems.
- Aware about the issues of food safety, water safety, vaccination, exercise and obesity, exposure to toxins.
- Frame a public health plan during any epidemic or spread of infectious disease etc.
- Analyze case studies of infant mortality and obesity.
- Assess the health inequalities with regard to gender, race, ethnicity, income etc.

SEMESTER-IV

Course Name: Behaviour and Chronobiology

Course Code: BSCHZOOC401

Course Type: Core (Theoretical & Practical)	Course Details: CC-8			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course aims to explain the natural behaviour patterns, how the behaviour varies among individuals and species (wild, domestic, and captive), how current and past environments and ecology influence not only behaviour, but also the underlying gene environment interactions that shape it.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Learn a wide range of theoretical and practical techniques used to study animal behaviour.
- Develop skills, concepts and experience to understand all aspects of animal behaviour.
- Objectively understand and evaluate information about animal behaviour and ecology encountered in our daily lives.
- Understand and be able to objectively evaluate the role of behaviour in the protection and conservation of animals in the wild.
- Consider and evaluate behaviour of all animals, including humans, in the complex ecological world, including the urban environment.

Course Name: Developmental Biology & Evolution

Course Code: BSCHZOOC402

Course Type: Core (Theoretical & Practical)	Course Details: CC-9			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course explains the sequence of events starting with a single cell to the production of a very complex organism. The course not only describes how embryos develop (embryology), but also highlights how the processes of development are brought about by changing individual cells into specialized cells with specific functions (the cellular level), and how genes within the genome of the organism drive and guide these changes (the molecular level). It also deals with a comparative account of development in some select groups of animals.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop critical understanding how a single-celled fertilized egg becomes an embryo and then a fully formed adult by going through three important processes of cell division, cell differentiation and morphogenesis.
- Understand how developmental processes and gene functions within a particular tissue or organism can provide insight into functions of other tissues and organisms.
- Realize that very similar mechanisms are used in very diverse organisms; and development is controlled through molecular changes resulting in variation in the expression and function of gene networks.
- Understand how the field of developmental biology has changed since the beginning of the 19th

century with different phases of developmental research predominating at different times.

- Examine the evolutionary history of the taxa based on developmental affinities.
- Understand the relevance of developmental biology in medicine or its role in development of diseases.

Course Name: Molecular Biology

Course Code: BSCHZOOC403

Course Type: Core (Theoretical & Practical)	Course Details: CC-10			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides an insight into the life processes at the subcellular and molecular levels. Other important aspects include DNA and molecular genetics including gene cloning, sequencing and gene mapping in addition to the powerful techniques that revolutionized the pharmaceutical, health and agricultural industries.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop an understanding of concepts, mechanisms and evolutionary significance and relevance of molecular biology in the current scenario.
- Get well versed in recombinant DNA technology which holds application in biomedical & genomic science, agriculture, environment management, etc. Therefore, a fundamental understanding of Molecular Biology will help in career building in all these fields.
- Apply their knowledge in problem solving and future course of their career development in higher education and research.
- Get new avenues of joining research in related areas such as therapeutic strategies or related opportunities in industry.

Course Name: Sericulture

Course Code: BSCHZOOSE401

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4-0-0	
Credit: 4	Full Marks: 50	CA Marks		ESE Marks
		Theoretical		Theoretical
		10		40

About the course :

The course gives insight into the principles of sustainable sericulture and how these principles can guide your silk moth rearing into an enduring practice. The students will know about the laws and by laws governing keeping silk moth.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Generation of skilled man power in the field of sericulture,
- To impart training in extension management and transfer of technology,
- To impart training in Post Cocoon Technology,
- To provide field exposure.

Course Name: Insect Pest, Vector Biology and Management**Course Code: BSCHZOOSE402**

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

The course provides an insight into the types of insect pests and vectors and the factors driving their spread. It also enlightens about the methods used to bring down their population below the threshold for a better management.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Identify the types of insect pests particularly the most common one.
- Know the methods of sampling of the pests.
- Understand the mode of action of nematicides and the consequences of their use.
- Understand the effective way of insect pest management strategy.

SEMESTER-V**Course Name: Biotechniques****Course Code: BSCHZOOC501**

Course Type: Core (Theoretical & Practical)	Course Details: CC-11		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

About the course :

This is the only laboratory course taught independently of lecture courses. It has full hands on approach to expose the students to modern techniques and methodologies. The diverse techniques from microscopy to spectroscopy, calorimetry, chromatography ELISA, tissue culture to cloning etc. are included to make the student well versed with these protocols and methods.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Understand the purpose of the technique, its proper use and possible modifications/improvement.
- Learn the theoretical basis of technique, its principle of working and its correct application.
- Learn the construction repair and adjustment of any equipment required for a technique.
- Learn the accuracy of technique.
- Learn the maintenance laboratory equipments / tools, safety hazards and precautions.
- Understand the technique of cell and tissue culture. Learn the preparation of solution of given percentage and molarity.
- Understand the process of preparation of buffer. Learn the techniques of separation of amino acids, proteins and nucleic acids.

Course Name: Microbiology, Parasitology & Immunology**Course Code: BSCHZOOC502**

Course Type: Core (Theoretical & Practical)	Course Details: CC-12			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

This is a composite course with remarkable utility and importance. Microbiology being the study of microorganisms such as viruses, bacteria etc., covers theoretical studies and practical proficiency training which may help in their placement at a clinical microbiological laboratory. Parasitology component takes care of the parasites and parasitism, emphasizing the influence of parasites on the ecology and evolution of free-living species, and the role of parasites in global, public, health. Immunology part provides the students with the fundamental knowledge of the immune system and its protective roles against diseases.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Carry out common procedures for culturing, purifying and diagnostics of micro-organisms understand the disease-causing potential of bacteria and viruses, and the responses of the immune system.
- Summarise and orally present current microbiological problem areas.
- Describe the mechanisms for transmission, virulence and pathogenicity in pathogenic micro-organisms.
- Diagnose the causative agents, describe pathogenesis and treatment for important diseases like malaria, leishmaniasis, trypanosomiasis, toxoplasmosis, schistosomiasis, cysticercosis, filariasis etc.
- Assess the importance of incidence, prevalence and epidemiology in microbiological diagnostic activities.
Know how resistance development and resistance transfer occur.
- Identify the major cellular and tissue components which comprise the innate and adaptive immune system.
- Understand how are immune responses by CD4 and CD8 T cells, and B cells, initiated and regulated.
- Understand how does the immune system distinguish self from non-self.
- Gain experience at reading and evaluating the scientific literature in the area.

Course Name: Genetic Engineering and Biotechnology**Course Code: BSCHZOODSE501**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1/2		L-T-P: 4-0-4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

This course gives an insight into the direct manipulation of DNA to alter the characteristics of an organism in a particular way. It envisages concepts, mechanisms, biological designs, functions and evolutionary significance of genetic modification or manipulation in special organisms and also discusses the recent advance in recombinant DNA technology.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Develop an understanding of the fundamental molecular tools and their applications of DNA modification and cloning.
- Appreciate shifting their orientation of learning from a descriptive explanation of biology to a unique style of learning through graphic designs and quantitative parameters to realize how such research and innovations have made science interdisciplinary and applied.
- Develop future course of their career development in higher education and research with a sound base.
- Apply their knowledge with problem solving approach to recommend strategies of genetic engineering for possible applications in Biotechnology and allied industry.

Course Name: Livestock Management and Animal Husbandry

Course Code: BSCHZOODSE502

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1/2		L-T-P: 4-0-4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides intensive study in livestock production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and conservation practices.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Understand skills and requirements necessary to find and maintain a job.
- Select and develop a breeding system for a livestock enterprise.
- Understand the importance of genetic improvement in animal production.
- Formulate feed rations for different classes of livestock.
- Identify common problems associated with livestock and horse herd health and solutions.
- Identify current and future issues relating to animal husbandry.
- Understand different marketing opportunities available for livestock production.

Course Name: Endocrinology

Course Code: BSCHZOODSE503

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1/2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course envisages information on endocrine system with emphasis on the structure of hypothalamus and anterior pituitary. The associated hormones and the related disorders will be explained.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand neurohormones and neurosecretions.
- Learn about hypothalamo and hypophyseal axis.
- Understand about different endocrine glands and their disorders.
- Understand the mechanism of hormone action.

SEMESTER-VI

Course Name: Biostatistics & Bioinformatics

Course Code: BSCHZOOC601

Course Type: Core (Theoretical & Practical)	Course Details: CC-13		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

About the course :

The course is aimed at introducing the application of bioinformatics and statistics in biology. The course gives an insight into the key concepts and methods used in bioinformatics; and computer storage, retrieval, analysis, visualization and distribution of information data related to biological macromolecules like DNA, RNA and proteins. It provides foundation on statistical methods to enable students to compute and interpret basic statistical parameters. As an interdisciplinary field it integrates biology, computer science, chemistry and statistics together sequence analysis structure analysis and functional analysis of biological data.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Know the theory behind fundamental bioinformatics analysis methods/tool.
- Be familiar with widely used bioinformatics databases.
- Know basic concepts of probability and statistics.
- Describe statistical methods and probability distributions relevant for molecular biology data.
- Know the applications and limitations of different bioinformatics and statistical methods.
- Perform and interpret bioinformatics and statistical analyses with real molecular biology data.
- Acquire knowledge of various databases of proteins, nucleic acids. Primary, secondary and composite databases. BLAST, FASTA, DOT PLOT
- Make phylogenetic predictions or prediction of structure of proteins and nucleic acids
- Develop understanding in Primer designing
- Understand data mining tool and its practical application in a case study
- Apply the knowledge in future course of their career development in higher education and research.

Course Name: Applied Zoology**Course Code: BSCHZOOC602**

Course Type: Core (Theoretical & Practical)	Course Details: CC-14			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course is unique in highlighting the commercial and industrial significance/value of animals. It discusses the techniques/ methods of rearing of animals for commercial usage and the prerequisites for their successful maintenance and sustenance.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Understand the culture techniques of prawn, pearl and fish.
- Understand silkworms rearing and their products.
- Understand the Bee keeping equipments and apiary management.
- Understand dairy animals management, the breeds and diseases of goats and learn the testing of egg and milk quality.
- Learn various concepts of lac cultivation.
- Be aware of a broad array of career options and activities in human medicine, biomedical research and allied health professions

Course Name: Wild Life Conservation and Management**Course Code: BSCHZOODSE601**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-3/4		L-T-P: 4-0-4		
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course is an introduction to wildlife management and gives an account of the tools used by wildlife managers. Topics covered are to equip students with adequate knowledge of various biodiversity monitoring methodologies, conservation and management issues of vertebrate pests, wildlife conflict and over abundant species, wildlife health and diseases.

Learning outcomes

After successfully completing this course, the students will be able to:

- Develop an understanding of how animals interact with each other and their natural environment.
- Develop the ability to use the fundamental principles of wildlife ecology to solve local, regional and national conservation and management issues.
- Develop the ability to work collaboratively on team-based projects.
- Demonstrate proficiency in the writing, speaking, and critical thinking skills needed to become a wildlife technician.
- Gain an appreciation for the modern scope of scientific inquiry in the field of wildlife conservation management.
- Develop an ability to analyze, present and interpret wildlife conservation management information.

Course Name: Mammalian Physiology**Course Code: BSCHZOODSE602**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-3/4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course deals with various physiological functions in mammals. It also gives an account of the metabolic/biochemical pathways and the probable impact of environment on them.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand the physiology at cellular and system levels.
- Understand the mechanism and regulation of breathing, oxygen consumption and determination of respiratory quotient.
- Understand how mammalian body gets nutrition from different biomolecules.
- Understand the process of digestion and excretion.
- Understand the organization of nervous system and process of nerve conduction.
- Understand the process of vision and hearing.
- Understand the process of muscle contraction.
- Learn the determination of haemoglobin content, blood groups and blood pressure.

Course Name: Aquatic Biology**Course Code: BSCHZOODSE603**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-3/4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The program of study aims to provide students with a broad-based foundation in science together with extensive subject knowledge in the discipline of aquatic biology. It also aims to develop a range of transferable research, analytical and communication skills.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand and apply relevant scientific principles in the area of aquatic biology.
- Employ scientific methodologies such as experimentation and data analysis in the area of aquatic biology.
- Critically analyse, interpret and evaluate information relevant to aquatic biology.
- Appreciate the multidisciplinary nature of the study of aquatic biology and engage positively with people and ideas beyond their own discipline.
- Explore some of the unique environmental problems dealing with aquatic environments.
- Develop employable skills in freshwater biological water quality analysis.

ZOOLOGY GENERIC (GE) SYLLABUS
COURSE LEARNING OUTCOMES
SEMESTER-I

Course Name: Basics of Systematics and Classification
Course Code: BSCHZOOGE101

Course Type: Generic Elective (Theoretical & Practical)	Course Details: GEC-1			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course will provides a comprehensive survey of the theory and methodology of systematics as they are applied today to all groups of organisms. The course is directed at those students interested in studies of evolutionary biology, biodiversity, conservation biology, and/or systematics.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Comprehend the basic concepts of animal taxonomy and zoological nomenclature
- Evaluate the significance of museum specimens
- Analyze the implications of biometrics, numerical taxonomy and cladistics.
- Understand the historical development of systematic biology from the 18th century to the present.
- Gain a basic grasp on the rules and philosophy of nomenclature.
- Question what you know, and need to know, to do systematic.
- Develop the capacity to critically evaluate the primary literature.

SEMESTER-II

Course Name: Vectors, Diseases and Control
Course Code: BSCHZOOGE201

Course Type: Generic Elective (Theoretical & Practical)	Course Details: GEC-2			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides an insight into the common vector-borne diseases, their etiology, role of vectors in their spread, host- parasite relationship and finally the strategies to manage these vectors.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop awareness about the causative agents and control measures of many commonly occurring diseases.
- Develop understanding about the favourable breeding conditions for the vectors.
- Devise strategies to manage the vectors population below threshold levels, public health importance.
- Undertake measures or start awareness programmes for maintenance of hygienic conditions, avoidance of contact from vector, destruction of breeding spots in the vicinity of houses and cattle shed by public health education campaign.

SEMESTER-III

Course Name: Biodiversity Conservation and Sustainable Development

Course Code: BSCHZOOGE301

Course Type: GE (Theoretical & Practical)	Course Details: GEC-3			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides information regarding the status of environment, the depletion of its resources, the loss of biodiversity and the remedial efforts undertaken by various agencies. The course is also focused to creating environmental awareness among learners.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Develop understanding for the environment which is largely degraded in the current scenario.
- Understand the importance of bio diversity and the consequences of bio diversity loss
- Learn about the judicious utilisation of natural resources
- Follow the concept of green technology and the eco-friendly practises and other prospects of environment protection.
- Understand and practice appropriate legal/regulatory and ethical issues in the context of the work environment.
- Design research projects to collect information to assess the effectiveness of current practices, and interpret the results of a statistical analysis of data, and use this to make informed decisions.

SEMESTER-IV

Course Name: Human Physiology

Course Code: BSCHZOOGE401

Course Type: GE (Theoretical & Practical)	Course Details: GEC-4			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides an insight into the structure and function of organ systems in humans and their involvement in body metabolism towards maintenance of homeostasis.

Learning outcomes

Upon successful completion of this course, students should be able to:

- Understand the process of digestion and its control
- Develop understanding in muscle structure and contraction mechanism
- Learn the process of respiration and transport of gases
- Understand kidney structure and regulation of urine formation
- Understand heart structure and functioning
- Understand functioning of nervous system.
- Understand function of endocrine glands and formation of gametes.

BSC PROGRAM IN ZOOLOGY
COURSE LEARNING OUTCOMES
SEMESTER – I

Course Name: Systematics & Diversity of Life - Protists to Chordates

Course Code: BSCPZOOC101

Course Type: Core (Theoretical & Practical)	Course Details: CC-1(1)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course is a walk for the Bachelor's entrant through the amazing diversity of living forms from simple to complex one. It enlightens how each group of organisms arose and how did they establish themselves in the environment with their special characteristics. It also deals with the differences and similarities between organisms on the basis of their morphology and anatomy which led to their grouping into taxa and clades.

Learning outcomes :

After successfully completing this course, the students will be able to :

- Develop understanding on the diversity of life with regard to protists, non chordates and chordates.
- Group animals on the basis of their morphological characteristics/ structures.
- Develop critical understanding how animals changed from a primitive cell to a collection of simple cells to form a complex body plan.
- Examine the diversity and evolutionary history of a taxon through the construction of a basic phylogenetic/ cladistics tree.
- Understand how morphological change due to change in environment helps drive evolution over a long period of time.
- The project assignment will also give them a flavour of research to find the process involved in studying biodiversity and taxonomy besides improving their writing skills. It will further enable the students to think and interpret individually due to different animal species chosen.

SEMESTER – II**Course Name: Comparative Anatomy & Physiology of Nonchordates****Course Code: BSCPZOOC201**

Course Type: Core (Theoretical & Practical)	Course Details: CC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course makes a detailed comparison of the anatomy of the different taxa of non-chordates. It also highlights how in the taxonomic hierarchy, there is an increase in the complexity of structure and function. The course thus gives an overview of the intricate life processes and adaptive radiations in nonchordates.

Learning outcomes :

After successfully completing this course, the students will be able to :

- Develop an understanding of the characters used to classify besides being able to differentiate the organisms belonging to different taxa.
- Acquire knowledge of the coordinated functioning of complex human body machine. Have hands on experience of materials demonstrating the diversity of protists and non-chordates.
- Understand the relative position of individual organs and associated structures through dissection of the invertebrate representatives.
- Realize that very similar physiological mechanisms are used in very diverse organisms. Get a flavor of research by working on project besides improving their writing skills. It will further enable the students to think and interpret individually.
- Undertake research in any aspect of animal physiology in future.

SEMESTER – III**Course Name: Fundamentals of Comparative Anatomy & Physiology of Chordates****Course Code: BSCPZOOC301**

Course Type: Core (Theoretical & Practical)	Course Details: CC-1 (3)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course offers insight into the physiology of chordates while giving an account of their anatomy. This course also explores vertebrate morphology with the aims of understanding major events in the history of vertebrate evolution and integrating the morphology of vertebrates with their ecology, behaviour and physiological adaptation in diverse habitats. Thermal relations encountered in endo- and ectothermic animals will be explained. Selective pressures that shape to different physiological phenotypes will also be addressed in the course.

Learning outcomes :

After successfully completing this course, the students will be able to :

- Develop an understanding of the evolution of vertebrates thus integrating structure, function and development.
- Have an overview of the evolutionary concepts including homology and homoplasy, and detailed discussions of major organ systems.
- Understand how cells, tissues, and organisms function at different levels. The course content also provides the basis of understanding their abnormal function in animal and human diseases and new methods for treating those diseases.
- Develop an understanding of the related disciplines, such as cell biology, neurophysiology, pharmacology, biochemistry etc.
- Get a flavor of research besides improving their writing skills and making them well versed with the current trends. It will further enable the students to think and interpret individually due to different aspects chosen.
- Undertake research in any aspect of animal physiology in future.

Course Name: Essentials of Beekeeping

Course Code: BSCPZOOSE301

Course Type: SE (Theoretical)	Course Details: SEC-1		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course:

This course tells the students what tools and equipment will be needed, the main activities in the beekeepers year, the laws and by laws governing keeping bees; discover the principles of sustainable beekeeping and how these principles can guide your beekeeping into an enduring practice.

Learning outcomes:

After successfully completing this course, the students will be able to:

- Explain what are the prerequisite to get started in beekeeping.
- Describe the laws around beekeeping in Vancouver.

- Discuss the responsibilities of urban beekeepers.
- Identify where to purchase equipment and demonstrate how to assemble it.
- Name and identify major parts of the honeybee such as the stinger or mandibular parts.
- Describe bee biology and anatomy from the perspective of managing bees.
- Describe the importance of wax and identify what to look for in comb during hive inspections

SEMESTER-IV

Course Name: Cytogenetics, Biochemistry, Immunology, Evolutionary Biology

Course Code: BSCPZOOC401

Course Type: Core (Theoretical & Practical)	Course Details: CC-1 (4)		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

About the course :

The course gives insight into the principles of cytology, genetics, immunology and Biochemistry. The students will know about the cell physiology and evolutionary biology.

Learning outcomes :

After successfully completing this course, the students will be able to :

- know about various components of a cell,
- know about cell physiology and sub-cellular metabolic processes
- know about components of immune system and their role in host defence system
- Undertake research in relevant field in future.

Course Name: Essentials of Sericulture**Course Code: BSCPZOOSE401**

Course Type: SE (Theoretical)	Course Details: SEC-2		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

The course gives insight into the principles of sustainable sericulture and how these principles can guide your silkmoth rearing into an enduring practice. The students will know about the laws and by laws governing keeping silkmoth.

Learning outcomes :

Upon successful completion of this course, students should be able to:

- Generation of skilled man power in the field of sericulture,
- To impart training in extension management and transfer of technology,
- To impart training in Post Cocoon Technology, and
- To provide field exposure

SEMESTER-V (PROGRAM)**Course Name: Fundamentals of Genetic Engineering and Biotechnology****Course Code: BSCPZOODSE501**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1 (1)		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

About the course :

This course gives an insight into the direct manipulation of DNA to alter the characteristics of an organism in a particular way. It envisages concepts, mechanisms, biological designs, functions and evolutionary significance of genetic modification or manipulation in special organisms and also discusses the recent advance in recombinant DNA technology.

Learning outcomes :

Upon successful completion of this course, students should be able to:

- Develop an understanding of the fundamental molecular tools and their applications of DNA modification and cloning.
- Appreciate shifting their orientation of learning from a descriptive explanation of biology to a unique style of learning through graphic designs and quantitative parameters to realize how such research and innovations have made science interdisciplinary and applied.
- Develop future course of their career development in higher education and research with a sound base.
- Apply their knowledge with problem solving approach to recommend strategies of genetic engineering for possible applications in Biotechnology and allied industry.

Course Name: Basics of Livestock Management and Animal Husbandry

Course Code: BSCPZOODSE502

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1(1)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course provides intensive study in livestock production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and conservation practices.

Learning outcomes :

Upon successful completion of this course, students should be able to:

1. Understand skills and requirements necessary to find and maintain a job.
2. Select and develop a breeding system for a livestock enterprise.
3. Understand the importance of genetic improvement in animal production.
4. Formulate feed rations for different classes of livestock.
5. Identify common problems associated with livestock and horse herd health and solutions.
6. Identify current and future issues relating to animal husbandry.
7. Understand different marketing opportunities available for livestock production.

Course Name: Public Health and Hygiene**Course Code: BSCPZOOSE501**

Course Type: SE (Theoretical)	Course Details: SEC-3		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

The course designed for public health and hygiene at graduation level will give understanding for health hygiene, dietary issues, diseases related to malnutrition, communicable and non-communicable diseases.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Identify current national and global public health problems.
- Aware about the issues of food safety, water safety, vaccination, exercise and obesity, exposure to toxins.
- Frame a public health plan during any epidemic or spread of infectious disease etc.
- Analyze case studies of infant mortality and obesity.
- Assess the health inequalities with regard to gender, race, ethnicity, income etc.

SEMESTER-VI**Course Name: Introduction to Wild Life Conservation and Management****Course Code: BSCPZOODSE601**

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1(2)		L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks
		Practical	Theoretical	Practical Theoretical
		30	10	20 40

About the course :

The course is an introduction to wildlife management and gives an account of the tools used by wildlife managers. Topics covered are to equip students with adequate knowledge of various biodiversity monitoring methodologies, conservation and management issues of vertebrate pests, wildlife conflict and over abundant species, wildlife health and diseases.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Develop an understanding of how animals interact with each other and their natural environment.
- Develop the ability to use the fundamental principles of wildlife ecology to solve local, regional and national conservation and management issues.
- Develop the ability to work collaboratively on team-based projects.
- Demonstrate proficiency in the writing, speaking, and critical thinking skills needed to become a wildlife technician.
- Gain an appreciation for the modern scope of scientific inquiry in the field of wildlife conservation management.
- Develop an ability to analyze, present and interpret wildlife conservation management information.

Course Name: Physiology of Mammals

Course Code: BSCPZOODSE602

Course Type: DSE (Theoretical & Practical)	Course Details: DSEC-1(2)			L-T-P: 4-0-4	
Credit: 6	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	10	20	40

About the course :

The course deals with various physiological functions in mammals. It also gives an account of the metabolic/biochemical pathways and the probable impact of environment on them.

Learning outcomes :

After successfully completing this course, the students will be able to:

- Understand the physiology at cellular and system levels.
- Understand the mechanism and regulation of breathing, oxygen consumption and determination of respiratory quotient.
- Understand how mammalian body gets nutrition from different biomolecules.
- Understand the process of digestion and excretion.
- Understand the organization of nervous system and process of nerve conduction.
- Understand the process of vision and hearing.
- Understand the process of muscle contraction.
- Learn the determination of haemoglobin content, blood groups and blood pressure.

Course Name: Insect Pest, Vector Biology and Management**Course Code: BSCPZOOSE601**

Course Type: SE (Theoretical)	Course Details: SEC-4		L-T-P: 4-0-0
Credit: 4	Full Marks: 50	CA Marks	ESE Marks
		Theoretical	Theoretical
		10	40

About the course :

The course provides an insight into the types of insect pests and vectors and the factors driving their spread. It also enlightens about the methods used to bring down their population below the threshold for a better management.

Learning outcomes :

Upon successful completion of this course, students should be able to:

- Identify the types of insect pests particularly the most common one.
- Know the methods of sampling of the pests.
- Understand the mode of action of nematicides and the consequences of their use.
- Understand the effective way of insect pest management strategy.