

Mock Question Paper
MICROBIOLOGY(HONS.)
PAPER-C7

Full Marks:50

Time:2hrs

1. Answer any *four* of the following :

2x4=8

- a) Distinguish between introns and exons
- b) What is central dogma?
- c) What do you mean by SD- sequence?
- d) What is pribnow box? Give its sequence
- e) What do you mean by ambiguous codon? Give example.
- f) What is cot curve?
- g) What do you mean by CRP? Give an example of an inducible operon

2. Answer any *three* of the following :

6x3=18

- a) How does post transcriptional modification of m RNA occur in eukaryotes?
- b) Give a comparative account among A,B and Z DNA
- c) Describe the cloverleaf model of t-RNA.
- d) Differentiate between inducible and repressible operon?What is attenuation?briefly describe it.
- e) Describe the rolling circle model of replication.
- f) Write a note on termination of transcription on the basis of dependency and independency of “Rho” factor.

6.

3. Answer any *two* of the following :

12x2=24

- a) Write a comprehensive note on translational phases(Initiation,elongation and termination) of protein synthesis in bacteria. **12.**
- b) Write notes on:
 - I .Initiation of transcription mentioning importance of σ factor.
 - II .Characteristic feature of genetic code. **6+6**
- c) Draw the growth curve of the medium containing both glucose and lactose as carbon sources.Explain the gene regulation mechanism operated in this culture.Distinguish between inducible and repressible system. **2+5+5**
- d) Give a comparison between prokaryotic and eukaryotic transcription. Write a short note on DNA methylation.

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