

**RANIGANJ GIRLS' COLLEGE**

**MODEL QUESTIONS-I**

**BOTANY [HONOURS]**

**SEMESTER-III**

**PAPER- CC-VII (Pteridophyte and Gymnosperm)    Course code:**

**F.M: 40**

**Time: 2 Hours**

**The figure in the right-hand margin indicates marks.**

**Candidates are required to give their answer in their own words as far as practicable.**

1. Answer any five questions of the following: 1×5=5

- (a) What is organ sui generis?
- (b) Name protocormous species of *Lycopodium*
- (c) Define coenosorus?
- (d) Name a Pteridophyte used to treat insomnia.
- (e) Define girdling leaf trace.
- (f) What is Lagenostome?
- (g) Define Copal.
- (h) What is sulphur shower?

2. Answer any five questions of the following: 2×5=10

- a. Mention the stellar types found in *Lycopodium sp.*
- b. Define Rhizophore.
- c. What is plicate parenchyma?
- d. Write 2 fern character of *Cycas*.
- e. What is Canada balsam and from where it is obtained?
- f. Write the different organ genera of *Williamsonia*.
- g. Define tent pole structure.
- h. What is the chromosome number of gymnosperm and why?

3. Answer any three questions of the following:

5×3=15

- (a) Describe with neat sketches the vegetative and reproductive features of *Rhynis sp.*
- (b) Describe the development of male gametophyte of *Pinus*. Mention its xerophytic features. 4+1
- (c) Describe with proper diagram the anatomical details of spore bearing organ of *Equisetum*.
- (d) State the enation theory of Bower.
- (e) Write the morphological nature of ovuliferous scales of *Pinus*.

4. Answer any one questions of the following:

10×1=10

- (a) Describe with proper anatomical labelled diagram the sporocarp of *Marsilea*. State the different views of morphological nature of sporocarp. 7+3=10
- (b) Compare the development of male gametophyte of *Cycas* and *Pinus*.
- (c) Mention the geological and geographical distribution of *Glossopteris*. Describe in brief its different organ genera

2+8=10