

RANIGANJ GIRLS' COLLEGE

MODEL QUESTIONS-II

BOTANY [HONOURS]

SEMESTER-II

PAPER- CC-IV (Morphology and Plant Anatomy) Course code: BSCHBOTC204

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 the ploidy level of endosperm?
 - (b) Define syngynia with example.
 - (c) Define campylotropus ovule.
 - (d) Define aril and caruncle with example.
 - (e) Define chalazogamy.
 - (f) What is obturator?
 - (g) Name one eminent Indian embryologist with his contribution.
 - (h) What is half-bordered pit?
 - (i) Define leaf trace.
 - (j) Define alburnum.
2. Answer any five questions of the following: 2×5=10
 - (a) What do you mean by 'Fibonacci series'?
 - (b) Distinguish between nuclear and cellular endosperm.
 - (c) Define verticillaster inflorescence with example.
 - (d) Define gynostagium.
 - (e) Distinguish between opposite decussate and opposite superposed phyllotaxy.
 - (f) What is histogen theory?
 - (g) Distinguish between intraxylary and extraxylary fibres.
 - (h) Distinguish between haplochilic and syndetochelic stomata.
 - (i) Distinguish between protoderm and procambium.
 - (j) Define bulliform cells. Mention its function.
3. Answer any three questions of the following: 5×3=15
 - (a) With suitable examples describe different types of stipules. What is stiple? 4+1=5
 - (b) Justify that 'Flower is a modified shoot'.
 - (c) With examples describe different types of schizocarpic fruits. Distinguish between sorosis and syconus. 4+1=5
 - (d) With suitable diagram describe the process of periderm formation. Define polyderm. 4+1=5

(e) How does intrastellar secondary growth take place in dicot stem? What is Duramen?

4+1=5

4. Answer any one questions of the following:

10×1=10

(a) Distinguish between ptyxis and vernation proper. With suitable examples describe the modification of leaf.

2+8=10

(b) Distinguish between racemose and cymose inflorescence. Briefly describe different types of special inflorescence with examples.

4+6=10

(c) Compare the anomalous secondary growth in Bignonia and Boerhaavia stem.

5+5=10