

Roll No :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

SP-655

M.Sc. (Final) Examination, 2021

BOTANY

Paper - V

(Angiosperm, Taxonomy, Morphology,
Anatomy and Embryology)

Time : 1½ Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit 50 words). Each question carries 2 marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit 200 words). Each question carries 5 marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit 500 words). Each question carries 10 marks.

Section-A

1. (i) What is Cytotaxonomy ?
- (ii) What is APG ?

BI-296

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SP-655 P.T.O.

- (iii) Define Monographs ?
- (iv) Write the sharing characters of Ranales.
- (v) What is time of angiosperm origin ?
- (vi) What is Trichome ?
- (vii) Write the role of Callose.
- (viii) What is function of Synergids ?
- (ix) Define Triple Fusion.
- (x) What are the role of haustoria in Endosperm ?

Section-B

2. Explain various modern tools of Plant Taxonomy.

Or

Write note on Takhtajan classification system with merit and demerit.

3. Explain the phylogeny of Centrospermae.

Or

What is ICBN ? Explain the rule, articles and recommendation of ICBN.

4. Explain the origin and evolution of Stamens.

Or

Describe the anatomy of Dicotyledonous Seeds.

5. Explain the different type of tapetum and give the role in Pollen Development.

Or

Describe the *in-vitro* pollination and its uses.

6. Explain the various embryonic types.

Or

Describe the role of embryology in plant breeding.

Section–C

7. Explain the origin, evolution and inter-relationships in dicots and monocots.
8. Give detail account of nature of heterotrophic families.
9. Describe a detail account of carpel evolution with suitable diagrams.
10. Write short notes on the following :
 - (a) Embryosac types
 - (b) Self-incompatibility
11. Write short notes on the following :
 - (a) Post fertilization changes in embryosac
 - (b) Types of Endosperm