

Q.P. Code – 42333

Third Semester B.Sc. Degree Examination, October/November 2019

(CBCS Scheme)

Botany

Paper III — EMBRYOLOGY OF ANGIOSPERMS AND TISSUE CULTURE

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates :

- 1) Answer all Parts.
- 2) Draw diagrams wherever necessary.

PART - A

I. Answer any **TEN** of the following :

(10 × 2 = 20)

1. Write any two contributions of BGL Swamy.
2. What is palynology? Mention its significance.
3. What is pollen kit? Mention its significance.
4. Mention any four types of ovules in Angiosperms.
5. What is Nucellus? Mention its significance.
6. What is Cleistogamy? Give an example.
7. Mention any four post fertilization changes.
8. What is Ruminant endosperm? Give an example.
9. What is Somatogamy? Give an example.
10. Mention any two applications of Tissue Culture.
11. What is Parthenocarpy? Mention the types.
12. What is Polyembryony? Mention the types.



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PART – B

II. Answer any **SIX** of the following questions :

(6 × 5 = 30)

Explain/Describe

13. Different type of pollen tetrads.
14. Nemas phenomenon.
15. Placentation and its types.
16. Adaptations for cross pollination.
17. Nuclear and Cellular Endosperm
18. Autoclave.
19. White's medium
20. Recurrent Apomixis.

PART – C

III. Answer any **FOUR** of the following :

(4 × 10 = 40)

21. Describe T.S. of Mature Anther.
22. Explain Polygonum and Fritillaria type of embryosac.
23. Explain double fertilization in Angiosperms.
24. Describe the process of development of Monocot embryo.
25. Explain steps involved in Tissue culture.
26. Explain :
 - (a) Control of fertilization
 - (b) Cybrids.