

Reg. No. : .....

Name : .....

Third Semester B.Sc. Degree Examination, March 2022  
Career Related First Degree Programme under CBCSS  
Botany and Biotechnology / Biotechnology (Multimajor)

Core Course V

BB 1341/BV 1341.1 : ANGIOSPERM ANATOMY AND  
REPRODUCTIVE BOTANY

(2013-2018 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer all questions in a word or one or two sentences. Each question carries 1 mark.

1. What are aleurone grains?
2. Define meristems.
3. What are complex tissues?
4. What is tapetum?
5. What is double fertilization?
6. What is Cystolith?
7. Name the scientist who proposed the Tunica–Corpus Theory.

8. Name any one test to study the viability of pollen grains.
9. What are tyloses?
10. Write short note on syngamy.

(10 × 1 = 10 Marks)

SECTION – B

Answer any **eight** questions. Each question carries 2 marks. (Answer not to exceed one paragraph)

11. Name any two plants yielding fibres of economic importance.
12. What are plasmodesmata? Mention its function.
13. Differentiate interfascicular cambium from intra fascicular cambium.
14. List out various extra cell wall materials seen in plant cell.
15. What are hydathodes? What are its functions?
16. Write short note on vascular tissue system.
17. Differentiate porogamy from chalazogamy.
18. What is collenchyma? What are the different types of collenchyma?
19. Differentiate ring porous wood from diffuse porous wood.
20. What are pits? How are they classified?
21. Mention the contribution of P. Maheswari to Indian embryology.
22. What do you understand by P-tapetum and C-tapetum?

(8 × 2 = 16 Marks)

### SECTION - C

Answer any **six** questions. Each question carries **4** marks. (Answer should not exceed 120 words)

23. Explain various barriers of fertilization.
24. Write a detailed account on mature pollen grain.
25. Differentiate vascular cambium from cork cambium
26. Describe various types of stomata seen in plants.
27. Explain the reasons for anomalous secondary growth in plants.
28. Write note on microsporogenesis.
29. Explain the structure of dicot embryo.
30. Describe various tissue systems seen in plants.
31. What are secretory tissues? Describe briefly various types of secretory tissues you have studied.

(6 × 4 = 24 Marks)

### SECTION - D

Answer any **two** questions. Each question carries **15** marks. (Answers not to exceed three pages)

32. With the help of labelled diagram explain the anomalous secondary growth in *Dracaena* stem.
33. Write an essay on various types of ergastic substances seen in plant cell.
34. Give an illustrated account of various types of endosperrn found in angiosperms.
35. Explain the characteristic features of meristematic tissues. Discuss various types of meristems and their functions.

(2 × 15 = 30 Marks)