MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No. :…… **Name :……**

Third Semester Career Related B.Sc. Degree Examination, November 2015

First Degree Programme under CBCSS

Core Course – III: (for Botany and Biotechnology)

AUBB341: Angiosperm Anatomy and Reproductive Botany

Time: **3** Hours Max. Marks: **80**

SECTION – A

*Answer **ALL t**he following each in a word or as short notes.*

1. Secondary cambium
2. Radial vascular bundle
3. Cystolith
4. Casparian strip
5. Any two function of stomata
6. porogamy
7. genetic makeup of angiosperm endosperm
8. Sieve plate
9. Pollen kit
10. Diacytic stomata

(10 × 1 = 10 Marks)

SECTION – B

*Answer any **EIGHT** questions, not exceeding one paragraph.*

11. Differentiate between monocot and dicot stomata.
12. What is the reason behind the durability of heart wood of teak ?
13. Differentiate between Ovule and seed.
14. Differentiate between simple pits and bordered pits.

15. Double fertilization.
16. What are Motor cells ? Write its importance.
17. Tyloses.
18. Write a note on lateral meristem.
19. What is plasmodesmata ? Give its function.
20. Explain palynology in relation to taxonomy.
21. What are lenticels ? Give its function.
22. Apical cell theory.

(8 × 2 = 16 Marks)

SECTION – C

*Short essay type : Answer any **SIX** questions.*

23. Explain the dehiscence of anther.
24. Write a note on types of endosperms.
25. Differentiate between heart wood and sap wood.
26. What is polyembryony ?
27. What are different types of secretory tissues ?
28. Explain the structure of monocot leaf.
29. Write a note on extra stelar secondary growth in angiosperm.
30. Explain the cell wall organisation.
31. Describe the ultra – structure of pollen grain.

(6 × 4 = 24 Marks)

SECTION – D

*Long essay type : Answer any **TWO** questions.*

32. Write an essay on ergastic substances in plant cells.
33. Explain the anomalous secondary growth found in stem of *Bignonia*. How it differs from a normal dicot stem ?
34. Write an essay on different types of embryosac.
35. With the help of suitable diagram write an essay on normal secondary growth found in dicot root.

(2 × 15 = 30 Marks)

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