

1B1N16015

(Pages :2)

Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2016

**BOT1C01T – Complementary Course – I(Theory) Angiosperm Anatomy & Micro
technique**

(2016 Admission onwards)

Max. Time: 3 hours

Max. Marks : 64

Part A

(Answer all questions)

1. Lysigenous oil glands are seen in
2. Tunica-carpus theory was proposed by
3. Bicollateral vascular bundle is present in
4. The balloon-like ingrowths from parenchyma cells into the xylem vessels are called
5. Lateral roots originate from
6. Velamen tissue is present in
a) Bamboo b) Polyalthea c) Vanda d) Ficus
7. What is lenticel?
8. Farmer's fluid is composed of
9. One millimeter is microns.
10. First Electron Microscope was developed by

(10 x 1=10 marks)

Part B

(Answer any 7 questions)

11. Describe the structure of latex vessels citing one example.
12. Briefly describe the composition of bark.
13. What is extra-floral nectary? Cite an example
14. What is sapwood?
15. What are fibres?
16. What is amphicribal vascular bundle?
17. Describe the structure of digestive glands in Nepenthes.
18. Write a brief note on the types of sclereids.
19. What is counter staining?
20. What is ultra microtome?

(7 x 2 = 14 marks)

Part C

(Answer any 6 questions)

21. Describe the structure of a dorsiventral leaf. Illustrate your answer.
22. Write a note on the stages of extra-stelar secondary growth.
23. Describe the structure of concentric vascular bundles with labelled diagram
24. Write note on secondary thickening in monocots.
25. Write a note on the thickening patterns of lignification of xylem vessels.
26. Describe the structure of monocot root.
27. Write note on the preparation, uses and properties of FAA
28. Write note on major types of Electron microscopes.

(6 x 4 = 24 marks)

Part D

(Answer any two questions)

29. Describe the secondary growth in *Tinospora* root
30. Describe different types of simple permanent tissues
31. Describe the structure and functioning of Compound microscope

(2 x 8 = 16 marks)

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Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
First Semester B.Sc Degree Examination, November 2016
BOT1B01T – Core Course I (Angiosperm Anatomy)
(2016 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

Part A

(Answer all questions)

1. Needle shaped crystals of Calcium oxalate occurring within tissues of certain plants are called.....
2. Tunica –Corpus theory was proposed by.....
3. The living component of xylem
4. A plant cell without nucleus
5. Intercalary meristem is seen in
6. Wood parenchyma is formed from
7. The outermost layer of primary plant body.
8. Canada balsam is obtained from
9. Mesarch condition is present in
10. Globoids are
11. Name a dicot with leptocentric vascular bundle
12. The tissue that is exclusively absent in roots

(12 x 1 = 12 marks)

Part B

(Answer any 7 questions)

13. Differentiate between a half bordered pit and bordered pit pair.
14. What are grit cells? Give example.
15. Explain the structure of plant cell wall.
16. What are Medullary bundles? Give example.
17. Give a note on the distribution of vessels in plants.
18. Mention various cell layers that constitute bark.
19. What are bulliform cells?
20. What is a perforation plate? Explain the types
21. Describe structure and functions of plasmodesmata.

(7 x 2 = 14 marks)

Part C

(Answer any 6 questions)

22. Describe the structure of isobilateral leaf
23. Differentiate between dicot and monocot stem.
24. What are non-living cell inclusions? Explain the different types of mineral crystals seen in cells with examples.
25. Describe different theories associate with organization of root apex.
26. With the help of diagrams explain different wall thickenings seen in xylem vessels.
27. Describe the structure of food conducting tissue in plants.
28. Give an account of the classification of meristem based on origin and development.
29. Explain different reserve food materials seen in cell.

(6 x 5 = 30 marks)

Part D

(Answer any three questions)

30. Explain with examples origin and types of vascular bundles found in plants.
31. Describe different types of secretory tissues seen in plants.
32. Explain the secondary growth in a typical dicot stem with diagrams.
33. With the help of labelled diagrams, describe the anomalous secondary growth in *Bignonia*
34. What are permanent tissues? Explain different types of simple tissues.

(3 x 8 = 24 marks)