

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Botany Degree Examination, November 2022

BBT1B01 – Angiosperm Anatomy, Reproductive Botany & Palynology

(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

SECTION A

(All questions can be attended, each question carries 2 marks. Ceiling: 20 Marks)

1. Write short notes on nectaries.
2. What is amoeboid tapetum?
3. What is Guttation?
4. Differentiate between fascicular and interfascicular cambium.
5. Define mesogamy.
6. What is secondary wall?
7. Comment on sporopollenin.
8. What are synergids? Add a note on its functions.
9. Comment on plasmodesmata.
10. Write short note on cystoliths.
11. Explain Apical cell theory.
12. What is periderm?

SECTION B

(All questions can be attended, each question carries 5 marks. Ceiling: 30 Marks)

13. Briefly explain the internal structure of the dicot leaf.
14. Give an account of cell wall materials.
15. What is the difference between concentric amphivasal and concentric amphicribal?
16. With suitable diagram, describe normal secondary growth in Dicot stem.
17. Analyse the process of pollination and agents of pollination.
18. Summarize the structure of dicot and monocot embryos.
19. Describe tetrasporic Adoxa type embryo sac development.

SECTION C

(Answer any one question, each question carries 10 marks. 1 x 10 = 10 Marks)

20. What is endosperm? Explain different types.
21. Write an account on the process of secondary growth in *Boerhaavia diffusa* stem with the help of diagrams.

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First Semester B.Sc Zoology Degree Examination, November 2022

BBT1C01 – Angiosperm Anatomy & Micro technique

(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

SECTION A**(All questions can be attended, each question carries 2 marks. Ceiling: 20 Marks)**

1. Write a short note on ray initials.
2. What are tyloses? Explain its role.
3. What are lenticels? How they are formed?
4. What is infiltration in serial sectioning?
5. What is bicollateral vascular bundle?
6. How acetocarmine is prepared?
7. Explain the role of water stomata.
8. Why dehydration is an important step in microtome serial sectioning?
9. What are bulliform cells? Mention its role.
10. Write any four features of meristematic tissues
11. Which tissue help plants for bending without breakage? How?
12. What is FAA? Give its composition.

SECTION B**(All questions can be attended, each question carries 5 marks. Ceiling: 30 Marks)**

13. How meristems can be classified?
14. Explain the theory which explains about the organisation of stem apex.
15. Explain the working of electron microscope. Mention the types of electron microscopes that you have studied.
16. Briefly explain secretory tissues in plants.
17. With suitable diagrams, explain intra-stelar secondary growth.
18. How annual rings are formed? Mention its importance.
19. Briefly explain the parts of a Rotary microtome.

SECTION C**(Answer any one question, each question carries 10 marks. 1 x 10 = 10 Marks)**

20. What are conducting tissues? Explain its types.
21. What is anomalous secondary growth? Explain anomalous secondary growth in *Boerhaavia* stem.