B

2B1N23232 (Pages : 1) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Botany Degree Examination, November 2023

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. What are glandular hairs?
2. Write short notes on laticifers.
3. What is pollenkitt?
4. Give an account oncasparian strip.
5. Discuss about Bulliform cells.
6. Define exarch condition.
7. What is an exine ? Explain its function.
8. What is meant by double fertilization?
9. Comment on pollen allergy?
10. Write short note on starch grains.
11. Explain Tunica-corpus theory.
12. What is bi-collateral vascular bundle?

SECTION B

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

13. With neat labelled diagram, explain the structure of pollen grain.
14. What are pits? Explain different types.
15. Explain the extra-cell wall materials.
16. What is simple tissue? Classify and explain its different types with suitable diagrams.
17. Describe bisporic Allium type embryo sac development.
18. With suitable diagram, describe the internal structure of young anther.
19. Briefly explain complex tissues.

SECTION C

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

20. Give a detailed account of non-living inclusions.
21. What is megasporogenesis? With neat labelled diagram, explain the development of eight nucleate embryo sacs in flowering plants.

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Zoology Degree Examination, November 2023

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. Explain the role of bark in plants?
2. What are conjoint vascular bundles?
3. Differentiate heartwood from sapwood.
4. What is the main difference between storied and non storied cambium?
5. How Saffranine is prepared?
6. Explain Histogen theory.
7. What is embedding?
8. Explain the roles of digestive glands in *Nepenthes*.
9. Define dermatogen. What is its role?
10. Explain protoxylem.
11. What is TEM? Explain its advantage.
12. What are vital stains? Give example.

SECTION B

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

13. What are simple tissues? Explain its role.
14. Briefly explain periderm formation.
15. With diagrams, explain normal secondary growth in Dicot root.
16. With neat labelled digrams, explain the structure of Hydathodes.
17. Explain killing and fixing and their importance.
18. Explain the steps involved in serial sectioning.
19. With diagrams, explain the types of vascular bundles that you have studied.

SECTION C

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

20. Explain normal secondary growth in *Vernonia* stem.
21. With suitable examples explain secretory tissues in plants.