25U218 (Pages: 2) Name : .....

Reg. No : .....

SECOND SEMESTER UG DEGREE EXAMINATION, APRIL 2026

(FYUGP)

(Regular/Supplementary/Improvement)

CC24UBOT2MN101 - PLANT MORPHOLOGY, PHYSIOLOGY AND PLANT RESOURCES

(Botany - Minor Course)

(2024 Admission onwards)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Illustrate axile placentation with a labeled diagram. [Level:2] [CO1]
2. Describe cyathium inflorescence. [Level:2] [CO1]
3. Explain any three significance of transpiration. [Level:2] [CO2]
4. Describe the difference between apoplast and symplast pathways in passive absorption. [Level:2] [CO2]
5. Summarize the significance of the light reactions in photosynthesis. [Level:2] [CO2]
6. Explain the difference between endosmosis and exosmosis. [Level:2] [CO2]
7. Explain seed dormancy and its significance in plants. [Level:2] [CO3]
8. Explain fruit ripening and its significance in plants. [Level:2] [CO3]
9. Explain the binomial and family of cotton and Coffee. [Level:2] [CO4]
10. Describe the binomial, family and morphology of useful part of clove. [Level:2] [CO4]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Describe the various arrangements of leaves in phyllotaxy. [Level:2] [CO1]
12. Discuss the role of guard cells in the opening and closing of stomata, emphasizing the role of K^+ ions. [Level:2] [CO2]
13. Explain cohesion-tension theory of Ascent of sap. [Level:2] [CO2]

14. Explain vernalization. [Level:2] [CO3]

15. Explain the role of ethylene in plant growth. [Level:2] [CO3]

16. Describe the process of abscission and its regulation by plant hormones. [Level:2] [CO3]

17. Explain the binomial, family, morphology of useful part and uses of two pulses you have studied. [Level:2] [CO4]

18. Explain the binomial, family, morphology of useful part and uses of Rauvolfia and Sandal. [Level:2] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Explain the different types of aestivation and symmetry in flowers with suitable diagrams and examples. [Level:2] [CO1]

20. Explain Red drop and Emerson enhancement effect and action and absorption spectrum of photosynthesis. [Level:2] [CO2]

(1 × 10 = 10 Marks)

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