

E 2151

(Pages : 2)

Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2016

Fourth Semester

Complementary Course—Botany

ANATOMY AND APPLIED BOTANY

(For B.Sc. Zoology Model I)

[2013 Admission onwards]

Time : Three Hours

Maximum Marks : 60

Part A

Answer all questions.

Each question carries 1 mark.

1. What is apomixis ?
2. What is a bicollateral vascular bundle ?
3. Write a note on hydathode.
4. What are the different types of thickenings seen in vessels ?
5. Explain parthenocarpy.
6. What is somatic embryogenesis ?
7. What are annual rings ?
8. What is storied cambium ?

(8 × 1 = 8)

Part B

Answer any six questions.

Each question carries 2 marks.

9. Write short note on companion cell.
10. What are the potential uses of artificial seeds ?
11. What are resin ducts ?
12. Explain polyembryony.
13. Differentiate sclereids and fibres.
14. Write a note on laticifers.
15. Explain the role of cambium in budding and grafting.
16. Explain different types of starch grains.

(6 × 2 = 12)

Turn over

Part C

*Answer any four questions.
Each question carries 4 marks.*

17. With suitable labelled diagram describe the primary structure of a dicot stem.
18. What is meristem ? Classify them based on position, origin and function.
19. What are the adaptations of epiphytes ?
20. What are the different methods of plant selection ?
21. Explain the components of tissue culture medium.
22. Explain the structure of monocot leaf with a diagram.
23. Give an account on secretory tissues.
24. Explain the procedure of hybridisation.

(4 × 4 = 16)

Part D

*Answer any two questions.
Each question carries 12 marks.*

25. With suitable labelled diagrams, describe the ultrastructure of cell wall.
26. Give an account of structure and function of xylem.
27. Describe the morphological and anatomical features of Hymenophytes.
28. Describe the normal secondary thickening in dicot roots with the help of diagrams.

(2 × 12 = 24)