Reg. No..   Name...

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2017
SEMESTER -4: BOTANY (COMPLEMENTARY FOR ZOOLOGY)
COURSE: U4CPBOT4 - ANATOMY AND APPLIED BOTANY
(For Supplementary - 2014 admission)

Time: Three Hours   Max Marks: 60

PART A
Answer **all** questions. Each question carries 1 mark.
1. What is scion?
2. What is emasculation?
3. Give the names of any two cytokinins used in tissue culture medium.
4. What is cystolith?
5. What is dendrochronology?
6. Name the components of xylem.
7. What is cork cambium?
8. What are bulliform cells?

(1 x 8 = 8)

PART B
Answer **any six** questions. Each question carries 2 marks.
9. Write a note on quarantine.
10. What are synthetic seeds?
11. What is approach grafting?
12. Write a note on polyembryony.
13. Classify meristems based on origin and development.
14. Write a note on storied and non-storied cambium.
15. Write an account of prosenchyma and aerenchyma.
16. Explain the structure of vascular bundle in a monocot stem.
17. Differentiate between hard wood and soft wood.
18. Write a note on nectaries.

(2 x 6 = 12)

PART C
Answer **any four** questions. Each question carries 4 marks.
19. Give a brief account of polyploidy breeding.
20. Write an account of clonal selection.
21. Explain the internal structure of a dicot leaf.
22. Explain any two theories regarding the organization of root apical meristem.
23. Describe extrastelar secondary growth in a dicot stem.
24. Write an account of the adaptations of Vanda.

(4 x 4 = 16)

PART D

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

25. Describe how secondary thickening takes place in dicot roots with suitable diagrams.

OR

26. Give an account of the morphological and anatomical adaptations of hydrophytes.

27. Describe vegetative propagation with reference to budding and layering.

OR

28. Write an account of mutation breeding. Add a note on the merits and demerits.

(12 x 2 = 24)

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