B.Sc. DEGREE END SEMESTER EXAMINATION MARCH 2018

SEMESTER – 4: BOTANY (CORE COURSE)

COURSE: **15U4CRBOT4: ANATOMY AND ANGIOSPERM MORPHOLOGY**

Common for Regular (2016 Admission) & Supplementary (2015 Admission)

Time: Three Hours   Max. Marks: 60

PART A

Answer *all* questions. Each question carries *1* mark

1. What is Lignification?
2. What is Bordered pit?
3. What is Apposition?
4. What is Histochemistry?
5. What are nectaries?
6. What is monochlamydeous flower?
7. What is Sorosis?
8. What is phyllotaxy?   (1 x 8 = 8)

PART B

Answer *any six* questions. Each question carries *2* marks.

9. What are the different types of Reserve food materials seen in plants?
10. Distinguish between Diffuse porous wood and Ring porous wood.
11. Explain Tunica-Corpus theory.
12. Write brief notes on Secretary tissues.
13. Give an account on economic importance of Plant fibres.
14. Draw a labeled diagram of a Bicollateral vascular bundle.
15. What are the major anatomical differences between dicot and monocot leaf?
16. What are stem modifications? Give two examples.
17. What is Cyathium?
18. What is a racemose inflorescence?   (2 x 6 = 12)

PART C

Answer *any four* questions; each question carries *4* marks.

19. What are the different types of sclereids?
20. Explain the Epidermal tissue system in Dicot stem with the help of suitable diagram.
21. What are the different types of cell wall thickening of tracheid?
22. Explain various metabolic byproducts seen in plants.
23. Distinguish between monochasial cyme and dichasial cyme?
24. Write a brief note on fleshy fruits.   (4 x 4 = 16)

PART D

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

25. Describe the anomalous secondary structures in Bignonia Stem with the help of suitable diagrams.

OR

26. Give an account on the structure and function of cambium. Explain normal secondary growth in Dicot root.

27. Classify meristem based on position. Add a note on theories of apical organization.

OR

28. Give an account of different types of inflorescence with suitable illustrations.

(12 x 2 = 24)

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