B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020

SEMESTER – 4: BOTANY (CORE COURSE)

COURSE: 15U4CRBOT4, ANATOMY AND ANGIOSPERM MORPHOLOGY

(For Regular - 2018 Admission and Supplementary / Improvement 2017, 2016, 2015 Admissions)

Time: Three Hours   Max. Marks: 60

PART A

I. *Answer **ALL** questions; each question carries **1** mark.*

   1. Who proposed Korper- Kappe theory?
   2. Name any two types of collenchymas based on distribution of wall thickenings.
   3. Comment on suberin.
   4. What is meant by dendrochrononology?
   5. What is intussusception?
   6. What is phellogen?
   7. What is carpel?
   8. What is meant by epipetalous stamen?   (1 x 8 = 8)

PART B

II. *Answer **ANY SIX** questions; each carries **2** marks*

   9. Explain tunica corpus theory.
   10. Classify meristems based on position in plant body.
   11. Name the components of phloem.
   12. What are passage cells? What is its role?
   13. Explain schizogenous and lysigenous development of cavities.
   14. What are lenticels?
   15. Write a short note on any two defects in wood.
   16. Differentiate between scorpioid and helicoid cyme.
   17. Distinguish hypogynous and epigynous flower.
   18. What is spathe? Give an example.   (2 x 6 = 12)

PART C

III. *Answer **ANY FOUR** questions; each carries **4** marks*

   19. What is periderm? How is it formed?
   20. Explain the structure of cambium.
   21. Describe different types of vascular bundles.

22. Write notes on a) nectaries and b) laticifers.

23. Write an account on simple fleshy fruits.

24. Write an account on extra cell wall thickening materials. (4 x 4 = 16)

PART D

IV. *Answer **ANY TWO** questions; each carries **12** marks.*

25. With the help of suitable diagrams, describe secondary growth in a dicot stem.

OR

26. What are the various reasons for anomalous secondary growth in dicotyledons? Describe anomalous secondary thickening in *Bougainvillea*.

27. Give an account on the structure and function of cambium. Add a note on the theories of apical organization.

OR

28. Give an account of different types of fruits with suitable examples and illustrations

(12 x 2 = 24)

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