## 3 SEM TDC BOTH (CBCS) C 5

2023

( Nov/Dec )

BOTANY

(Core)

Paper: C-5

## ( Anatomy of Angiosperms )

Full Marks: 53 Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

- 1. (a) Answer the following as directed:  $1\times3=3$ 
  - (i) Vascular bundles in dicot stem are open, conjoint and endarch. (Write True or False)
  - (ii) Hydrophytes have less mechanical tissue.

(Write True or False)

(iii) Study of the annual growth in woody trees and shrubs is known dendrochronology/chronology/ oncology/None of the above. (Choose the correct answer)

(b) Fill in the blanks:

 $1 \times 2 = 2$ 

- (i) Casparian strips are found in
- (ii) Wound healing in plants initiated by \_\_\_\_ meristem.
- 2. Write short notes on the following 4×3=12 (any three):
  - (a) Anatomical adaptation of xerophytes
  - (b) Importance of plant anatomy in pharmacognosy
  - (c) Kranz anatomy
  - (d) Korper-Kappe theory
  - (e) Quiescent centre
- 3. Write the difference between the following 4×3 (any three): 4×3=12
  - (a) Shoot apex and root apex
  - (b) Dicot stem and monocot stem
  - (c) Early wood and late wood
  - (d) Hydrophytes and epiphytes

4. What are complex tissues? How are they formed? How are they classified? What is the importance of complex tissues in plants? 2+2+4+4=12

Or

What is meant by ergastic substances? How are they formed? What are the functions of ergastic substances? Write the different types of ergastic substances found in plants. 2+2+2+6=12

5. What is secondary growth? How does it differ from primary growth? Explain the process of secondary growth in dicot stem. Write the significance of secondary growth. 2+2+6+2=12

Or

What is cambium? Write about the origin and seasonal activity of cambium. 3+3+6=12

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