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 : 1×3=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 as dendrochronology/chronology/oncology/None of the above.
   (Choose the correct answer)

(Turn Over)

(b) Fill in the blanks : 1×2=2

    (i) Casparian strips are found in _____.

    (ii) Wound healing in plants is initiated by _____ meristem.

2. Write short notes on the following (any *three*) : 4×3=12

    (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 (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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