FYUGP/Sem-4/BT-CE1

2026
(Regular)
Botany (Core)
Paper Code : BT-CE-4214
Paper Name : Morphology, Anatomy & Embryology of Angiosperms

Time : 2 hours ***Full Marks : 45***

The figures in the margin indicate full marks for the questions.

1. Answer the following questions as directed : 1×4=4
   a) What is syntelome ?
   b) Give one example of ruminate endosperm.
   c) Name one type of racemose inflorescence.
   d) What are lithocytes ?
2. Answer the following questions : 2×3=6
   a) What anatomocal adaptations have evolved in xerophytes to survive in xeric conditions ?
   b) What are the functions of a suspensor cell ?
   c) Define pharmacognosy ?
3. Answer ***any three*** of the following questions : 5×3=15
   a) Describe briefly about the pollen wall protein.
   b) Discuss the types and functions of endosperm.
   c) Describe shortly about Krantz Anatomy with labelled diagram.
   d) Telome theory.
   e) How are meristematic tissues classified on the basis of the position in the plant body ?
   f) Describe in brief the tetrasporic embryosac with a neat diagram.

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4. Answer ***any two*** of the following questions : 10×2=20

a) Discuss the embryonic development in monocots with the help of neat labelled diagrams. 10

b) Describe the fertilization process starting from the entry of pollen tube into the ovule. 10

c) Explain in details the classification, causes and importance of polyembryony. 10

d) What is secondary growth ? How does the formation of combium during secondary differ in a root and stem ? 2+8=10

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