5 SEM TDC BOTH (CBCS) C 11

2024

(November)

BOTANY

(Core)

Paper : C–11

(Reproductive Biology of Angiosperms)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×5=5

(a) _____ is the edible part of litchi.

(Fill in the blank)

(b) The liquid part of coconut fruit is embryo/endosperm/nucellus.

(Choose the correct answer)

(c) The outermost layer of pollen grains is called _____.

(Fill in the blank)

(d) The study of fruits is known as pomology/palynology/fruitology.

(Choose the correct answer)

(e) Drusa type of embryo sac is monosporic/bisporic/tetrasporic.

(Choose the correct answer)

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

(a) Polyembryony and its importance

(b) Contribution of P. Maheswari towards embryology of angiosperms in India

(c) Parthenocarpy and its application in agriculture

(d) Evidences which prove that 'flower is a modified shoot'

(e) Mechanism of pollination

3. What do you mean by palynology? Write briefly the scope of palynology in taxonomy and geology. 1+7+4=12

Or

What is microgametogenesis? Describe the ultrastructure of pollen tube with its contents and describe the path of pollen tube from its germination till its entry into the embryo sac. 2+5+5=12

4. What is megagametogenesis? With suitable diagrams, write the different types of tetrasporic embryo sac of angiosperms. 2+10=12

Or

Write notes on the following : 4×3=12

(a) Special structures of ovule

(b) Double fertilization

(c) Tapetum and its development

5. With a suitable diagram, write about the development of monocotyledonous embryo. 12

Or

What is the significance of endosperm? Describe the structure and development of different types of endosperm with diagram. What are mosaic and ruminate endosperms? 1+9+2=12

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