

Total No. of Printed Pages—3

2 SEM TDC BOTH (CBCS) C 4

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(May)

BOTANY

(Core)

Paper : C-4

(Archegoniate)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

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

1. Choose the correct option of the following :

1×5=5

- (a) The true elaters are found in *Riccia/Marchantia/Anthoceros*.
- (b) The Pteridophytes differ from Bryophytes for presence of vascular tissue/motile spores/alternation of generation.
- (c) Coralloid root is found in *Cycas/Pinus/Ginkgo*.

(2)

(d) Reticulate venation is found in the leaves of *Cycas*/*Ginkgo*/*Gnetum*.

(e) Bisporangiate cones are found in fossil plant *Rhynia*/*Cycadeoidea*/*Sphenophyllum*.

2. Write short notes on any *three* of the following : $4 \times 3 = 12$

(a) Homospory and heterospory

(b) Sporophyte of a *Polytrichum*

(c) Spore-producing organs of *Marsilea*

(d) Economic importance of gymnosperms

3. What is alternation of generation? Describe alternation of generation with the help of life cycle of *Anthoceros*. $2 + 10 = 12$

Or

Describe any *two* of the following : $6 \times 2 = 12$

(a) Sporophyte of *Sphagnum*

(b) Antheridiophore of *Marchantia*

(c) Ecological importance of bryophytes

4. What is telome theory? Describe the elementary process of organogenesis in telome theory. $2 + 10 = 12$

(3)

Or

Compare the following : $6 \times 2 = 12$

(a) Strobilus of *Selaginella* and *Equisetum*

(b) Apospory and apogamy in pteridophytes

5. Write short notes on any *three* of the following : $4 \times 3 = 12$

(a) Xerophytic characters of gymnosperms

(b) Male cone of *Pinus*

(c) Angiospermic characters of *Gnetum*

(d) '*Ginkgo* is a living fossil'

(e) Theories of fossilization
