

Total No. of Printed Pages—3

**2 SEM TDC BOTH (CBCS) C 4**

**2 0 2 2**

(June/July )

**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 answer of the following :

1×5=5

(a) Spores of pteridophytes are haploid/  
diploid / triploid / tetraploid.

(b) Three-chambered sporangium is found  
in *Lycopodium* / *Selaginella* / *Equisetum*  
/ *Psilotum*.

(c) *Rhynia* is known from Silurian /  
Ordovician / Cambrian / middle  
Devonian.



( 2 )

- (d) Gymnospermic endosperm is haploid / diploid / triploid / tetraploid.
- (e) Reticulate venation is found in the leaves of *Cycas*/*Pinus*/*Ginkgo*/*Gnetum*.
2. Write short notes on any three of the following : 4×3=12
- (a) Sporophyte of *Marchantia*
- (b) Merits of telome theory
- (c) Xerophytic characters of gymnosperm
- (d) Process of fossilization
3. With suitable sketch, compare the thallus structure of *Riccia*, *Marchantia* and *Anthoceros*. Which is most primitive according to your opinion and why? 9+3=12
- Or
- Describe the following : 6+6=12
- (a) Sporophyte of *Polytrichum*
- (b) Ecological importance of bryophyte
4. What is stele? Give an account of the stelar organization in pteridophytes from evolutionary point of view. Give suitable diagram. 2+7+3=12



( 3 )

Or

Write notes on the following :

6+6=12

(a) Morphological nature of rhizophores in *Selaginella*

(b) Sporocarp of *Marsilea*

5. Write short notes on any three of the following :

4×3=12

(a) Development of male gametophytes of *Pinus*

(b) *Psilophyton*

(c) Fern like characters of *Cycas*

(d) Angiospermic characters of *Gnetum*

(e) Distribution of gymnosperms in India