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( CBCS )

( 2nd Semester )

## BOTANY

( Honours )

Paper : BCC–04

**[ Archegoniate (Bryophytes, Pteridophytes and Gymnosperms) ]**

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

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

1. (a) What are bryophytes? Mention the general characteristic features of bryophytes in detail.　　2+13=15

*Or*

(b) Write short notes on any *two* of the following :　　7½×2=15

(i) Archegoniates

(ii) Characters of pteridophytes

(iii) Rhynia

　　　　　　( Turn Over )

2. (a) Write a note on the classification of bryophytes (up to family) as given by Proskauer, 1957. Add some points on the economic importance of bryophytes. 10+5=15

*Or*

(b) Describe the morphology of *Anthoceros*. Write a note on the reproduction of *Anthoceros*. 7½+7½=15

3. (a) Describe the morphology and reproduction of *Equisetum*. 6+9=15

*Or*

(b) Write short notes on any *two* of the following : 7½×2=15

   (i) Heterospory and seed habit
   (ii) Telome theory
   (iii) Stelar evolution

4. (a) Discuss, in detail, the general characteristic features of gymnosperms. Give some characteristic features of *Gnetum*. 9+6=15

*Or*

(b) Write notes on the following : 7½+7½=15
   (i) Reproduction in *Cycas*
   (ii) Characters of *Pinus*

( *Continued* )

5. *(a)* Write notes on the following : 7½+7½=15

    *(i)* Geological timescale

    *(ii)* Paleobotany in relation to exploration of fossil fuels

*Or*

*(b)* Write notes on the following : 7½+7½=15

    *(i)* Fossil types and its formation

    *(ii)* Scope of paleobotany

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