K16U 0571

Reg. No. : ....

Name : ....

IV Semester B.Sc. Degree (CBCSS – 2014 Admn. – Regular)
Examination, May 2016
CORE COURSE IN BOTANY/PLANT SCIENCE
4B04 BOT/PLS : Bryology, Pteridology, Gymnosperms and
Palaeobotany

Time : 3 Hours

Total Marks : 40

SECTION – A

Answer **all** :

1. A feature exhibited by Gnetum
   a) Transfusion tissue
   b) Algal layer
   c) Pavement tissue
   d) Mucilage canal

2. Which of these is not a fossil ?
   a) Cast
   b) Compression
   c) Petrifaction
   d) Wax

3. Riccia is a
   a) Hornwort
   b) Moss
   c) Liverwort
   d) Fern

4. Rhizophore is a characteristic of
   a) Nephrolepis
   b) Selaginella
   c) Cycas
   d) Marsilea   **(4×1=4)**

SECTION – B

Answer **any eight** :

5. List out the primitive features of Cycas.

6. Differentiate between pycnoxylic and manoxylic wood.

7. Write the economic importance of bryophytes.

8. Explain the morphology of equisetum plant with the help of diagrams.

9. Describe the structure of Funaria gametophyte using sketches.

P.T.O.

10. Explain the structure of the Marsilea plant.

11. Discuss stelar evolution in pteridophytes.

12. Write on the process of fossil formation.

13. Give an account on the angiosperm characters of Gnetum.

14. How does the Riccia sporophyte differ from that of Anthoceros ?

15. Explain diploxylic condition.

16. Heterospory leads to seed habit. Comment. (8×2=16)

SECTION – C

Answer **any four** :

17. Write an account on the affinities of bryophytes with pteridophytes.

18. What are coralloid roots ? Explain its morphology and anatomy using diagrams.

19. Draw and describe the structure of the gemma cup.

20. What is meant by geological time scale ?

21. Give the structure of gametophyte of Nephrolepis.

22. Discuss the theories related to the origin of bryophytes. (4×3=12)

SECTION – D

Answer **any one** :

23. Anthoceros is a synthetic genus. Discuss.

24. Illustrate and compare the strobilus structure in *Cycas*, *Pinus* and *Gnetum*.

25. Describe the sporophyte structure and life cycle in Selaginella with the aid of sketches. (1×8=8)

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P.T.O.