



K20U 0296

Reg. No. : .....

Name : .....

**II Semester B.Sc. Degree (CBCSS – Supplementary/Improvement)**  
**Examination, April 2020**  
**COMPLEMENTARY COURSE IN BOTANY/PLANT SCIENCE**  
**2C02 BOT/PLS : Archaeogniatae, Palaeobotany and Reproduction in**  
**Angiosperms**  
**(2014–2018 Admissions)**

Time : 3 Hours

Max. Marks : 32

**SECTION – A**

1. Calyptra is \_\_\_\_\_ in origin.
  - a) Gametophytic
  - b) Sporophytic
  - c) Both gametophytic and sporophytic
  - d) None of these
2. Triple fusion involves fusion of \_\_\_\_\_
  - a) Male gamete with synergids
  - b) Synergids with secondary nucleus
  - c) Male gamete with antipodals
  - d) Male gamete with secondary nucleus
3. 'Age of cycads' is \_\_\_\_\_
  - a) Mesozoic era
  - b) Palaeozoic era
  - c) Archaeozoic era
  - d) Cretaceous period
4. Gametophytic generation of ferns is known as \_\_\_\_\_
  - a) Prothallus
  - b) Gametophyte
  - c) Sporogonium
  - d) Archegonium
5. Apophysis is a structure seen in \_\_\_\_\_
  - a) Selaginella
  - b) Ovule of Cycas
  - c) Rhizophore of Selaginella
  - d) Microsporophyll of Cycas

(5×1=5)

P.T.O.



SECTION – B  
(Answer any four)

6. Draw the male reproductive structure of Funaria.
7. What is helobial endosperm ? How it is significant to plants ?
8. What is ligule ? Mention its function.
9. Explain the morphology of Cycas sporophyte.
10. What is Lepidocarpon ? Mention its striking features.
11. Write down any four advanced features of Angiosperms. (4×2=8)

SECTION – C  
(Answer any three)

12. With neat labelled diagram explain the internal anatomy of Riccia gametophyte.
13. Explain the structure of dicot embryo ?
14. With diagram explain the structure of Polygonum type embryo sac.
15. Write a brief note on Rhynia.
16. With diagrams explain the structure of Cycas ovule. (3×3=9)

SECTION – D  
(Answer any two)

17. With diagrams explain the types of inflorescence you have studied.
18. With suitable illustrations explain the life history of Cycas.
19. With neat labelled diagram explain megasporogenesis and megagametogenesis in Angiosperms.
20. Compare the reproductive structures of Riccia and Funaria. Comment on advanced features of Funaria sporophyte. (2×5=10)