



K17U 1023

Reg. No. :

Name :

II Semester B.Sc. Degree (C.B.C.S.S. – Reg./Supple./Imp.)
Examination, May 2017

COMPLEMENTARY COURSE IN BOTANY/PLANT SCIENCE
2C02 BOT/PLS : Archaeogoniatae, Palaeobotany and Reproduction in
Angiosperms
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 32

SECTION – A

Answer all.

1. Sago is obtained from
 - a) *Selaginella*
 - b) *Funaria*
 - c) *Cycas*
 - d) *Riccia*
2. Generative cell gives rise to
 - a) Tube nucleus
 - b) Male gametes
 - c) Endosperm
 - d) Egg
3. Connective forms part of
 - a) Ovule
 - b) Stamen
 - c) Pistil
 - d) Pedicel
4. That which helps liberation of spores in *Funaria*.
 - a) Trabeculae
 - b) Peristome
 - c) Apophysis
 - d) Theca
5. Sterile cells in the sporophyte of *Riccia*.
 - a) Seta
 - b) Nurse cells
 - c) Calyptras
 - d) Spores.

(5×1=5)

P.T.O.



SECTION – B

Answer any four.

6. Explain the structure of the monocot embryo.
7. Write notes on double fertilisation.
8. Explain Rhizophora.
9. What is meant by diploxylic condition ?
10. Give an account on the appendages seen in the thallus of *Riccia*. What are their functions ?
11. What is meant by protonema ? (4×2=8)

SECTION – C

Answer any three.

12. What is a fossil ? Explain the processes involved in fossilisation.
13. With the help of diagrams discuss microgametogenesis in angiosperms.
14. Draw a neat labelled diagram of the strobilus in *Selaginella*.
15. What are coralloid roots ?
16. Explain the structure of the antheridial cluster in *Funaria* with the help-of sketches. (3×3=9)

SECTION – D

Answer any two.

17. With the aid of diagrams explain the morphology and anatomy of *Rhynia*.
18. Describe the alternation of generation seen in the life cycle of *Riccia* and add a note on how it differs from *Funaria* in structure of gametophyte and sporophyte.
19. Describe the structure of the *Cycas* ovule with the help of a diagram.
20. With the help of diagrams discuss the *Polygonum* type of embryo sac and the different types of endosperm seen in angiosperms. (2×5=10)