(Pages : 2)

Reg. No....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2018

(CUCBCS9-UG)

Complementary Course

BOT 2C 02 - CRYPTOGAME, GYMNOSPERMS AND PLANT PATHOLOGY

Time : Three Hours

Maximum : 64 Marks

Section A Answer all questions. Bach question carries 1 mark.

Answer in a word :

- The subunit of protein coat in viruses.
- A symbiotic bacterium.
- Fusion of two similar gametes.
- The alga commonly called pond silk.
- The component of cell wall in fungi.
- Any one spore for asexual reproduction in fungi.
- The female reproductive structure in Riccia.
- The leaf producing sporangium in pteridophytes.
- The cyanobacterium found in coralloid roots.
- The pathogen of Citrus canker.

 $(10 \times 1 \times 10 \text{ marks})$

Section B (Short Answers)

Answer any seven questions.

Each question carries 2 marks.

- Write a brief note on binary fission in bacteria.
- 12. What are heterocysts? What is its role?
- 13. Distinguish between scalariform and lateral conjugation.
- 14. Write an account of the pigments and reserve food in brown algae.
- What is anothecium? Give an example.
- Classify lichens based on external morphology.

Turn over

- 17. Why bryophytes are regarded as plant amphibians?
- 18. Write an account of the leaves in Sciaginella.
- Write an account of vegetative reproduction in Cycas.
- 20. What are the symptoms of blast of paddy?

 $(7 \times 2 = 14 \text{ marks})$

Section C (Short Essays)

Answer any six questions.

Each question carries 4 marks.

- Describe the structure of TMV.
- 22. Write about the stages in the life-cycle of Puccinia in wheat plant.
- 23. Explain the thallus structure of Sargassum.
- Write an account of the importance of lichens.
- Describe the methods of vegetative multiplication in bryophytes.
- 26. Write the important features of the division Basidiomycotina.
- 27. Write notes on the importance of bacteria in agriculture and industry.
- 28. Describe the structure of strobilus in Selaginella.

 $(6 \times 4 = 24 \text{ marks})$

Section D

Answer ony two questions.

Each question carries 8 marks.

- 29. Describe the structure of thallus and sex organs of Polysiphonia.
- 30. Describe the reproductive structures in Cycas.
- 31. Describe briefly the life cycle of Riccia.

 $(2 \times 8 = 16 \text{ marks})$