

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-2023(Old Course)****CRYPTOGAMIC BOTANY AND PLANT PATHOLOGY (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Q-1(A) Answer the following.(Any one out of Two) (07)

- 1) Write a detailed account of the evolution of sex in Algae.
- 2) Describe sexual reproduction in *Ectocarpus*.

Q-1(B) Attempt any one out of two (04)

- 1) Describe sexual reproduction in *Caulerpa*.
- 2) Explain Globule of *Chara* with diagram.

Q-1(C) Attempt any three Out of five (03)

- 1) Name one species of *Coleochaete* in which heterotrichous habit is well represented.
- 2) Give name of female sex organ of *Chara*.
- 3) In *Caulerpa* axis bears lateral out growth which are known as _____.
- 4) What is oogamous?
- 5) Give two types name of sporangia in *Ectocarpus*.

Q-2(A) Answer the following.(Any one out of Two) (07)

- 1) Explain with diagram: Reproduction in *Alternaria*.
- 2) Describe: Different types of spores in Fungi.

Q-2(B) Attempt any one out of two (04)

- 1) Explain: Apothecium of *Peziza*.
- 2) Give schematic representation of life cycle of *Alternaria*.

Q-2(C) Attempt any three Out of five (03)

- 1) Which fungus is known as cup fungi?
- 2) Where we can find the *Alternaria*?
- 3) In suitable condition each conidium germinates by producing _____ germ tubes at a time.
- 4) True or False: *Peziza* is saprophytic fungus.
- 5) Is *Alternaria* reproduced by sexual reproduction? Yes or No.

Q-3(A) Answer the following.(Any one out of Two) (07)

- 1) Describe internal structure of *Sphagnum* sporophyte with diagram.
- 2) Describe *Pellia* thallus.

Q-3(B) Attempt any one out of two (04)

- 1) Explain *Pellia* archegonia.
- 2) Describe the external and internal features of the leaves of *Sphagnum*.

Q-3(C) Attempt any three Out of five (03)

- 1) In which species of *Sphagnum*, retort cells are present in the main axis?
- 2) Spore mother cell of *Sphagnum* is _____(diploid/haploid).
- 3) Explain the term – Coma.
- 4) *Sphagnum* is commonly known as _____
- 5) What is the function of hadrom in *Sphagnum*?

Q-4(A) Answer the following.(Any one out of Two) (07)

- 1) Describe external features of Rhynia.
- 2) Explain internal structure of Marsilea sporocarp.

Q-4(B) Attempt any one out of two (04)

- 1) Write the morphology of Marsilea.
- 2) Explain: Internal structure of Ophioglossum rhizome.

Q-4(C) Attempt any three Out of five (03)

- 1) What is the nature of development of sporangium of Ophioglossum?
- 2) Calamites possess _____ height.
- 3) Which type of stele present in Marsilea stem?
- 4) Ophioglossum belongs to _____ order.
- 5) How many number of microspores produced per microsporangium in Marsilea?

Q-5(A) Answer the following.(Any one out of Two) (07)

- 1) Describe the symptoms, causal organism and control of Tikka disease of Groundnut.
- 2) Explain: Red rot of Sugarcane.

Q-5(B) Attempt any one out of two (04)

- 1) Describe: Citrus canker.
- 2) Write important symptoms of Leaf curl of Papaya.

Q-5(C) Attempt any three Out of five (03)

- 1) Causal organism of Whip Smut of Sugarcane is _____
- 2) Red rot of Sugarcane disease is caused by _____
- 3) The chemical used for killing fungal pathogens are known as _____
- 4) Define: Necrosis
- 5) Disappearance of chlorophyll in infected plants is called _____
