

B.Sc. Semester - 5 (CBCS) Examination

July-2025 (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.

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

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

Que.1(B) Attempt any one (out of two) (04)

- 1) Explain cell structure of *Ectocarpus*.
- 2) Describe sexual reproduction in *Caulerpa*.

Que.1(C) Attempt any three (Out of five) (03)

- 1) Name one species of *Coleochaetae* in which heterotrichous habitat is well represented.
- 2) Write the occurrence of *Chara*.
- 3) True or False: In *Ectocarpus* alternation of generation is isomorphic type.
- 4) The long colourless neck of *Coleochaetae* archegonia is known as _____
- 5) What are the characteristics of the rhizoids of *Chara*?

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

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

Que.2(B) Attempt any one (out of two) (04)

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

Que.2(C) Attempt any three (Out of five) (03)

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

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

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

Que.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*.

Que.3(C) Attempt any three (Out of five) (03)

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

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

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

Que.4(B) Attempt any one (out of two) (04)

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

Que.4(C) Attempt any three (Out of five) (03)

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

Que.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.

Que.5(B) Attempt any one (out of two) (04)

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

Que.5(C) Attempt any three (Out of five) (03)

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