

B.Sc. Semester - 5 (Remedial) (CBCS) Examination

February/March. -2020

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 in details. (Attempt any one) (07)

- (1) Give an illustrated account of the male reproductive organs of Chara.
- (2) Write a detailed account of the evolution of sex in algae.

Que-1 (B) Answer in brief: (Attempt any one) (04)

- (1) Explain: Spermatophyte of Coleochaetae.
- (2) Write note on: Plurilocular sporangia in Ectocarpus.

Que-1 (C) Answer in very short: (Attempt any three) (03)

- (1) What is the name of female sex organ of Chara?
- (2) Give one example of alga which show physiological anisogamy.
- (3) What type of the thallus in Caulerpa?
- (4) Name one species of Coleochaete in which heterotrichous habit is well represented.
- (5) What are the characteristics of the rhizoids of Chara?

Que-2 (A) Answer in details: (Attempt any one) (07)

- (1) Give an account of the habitat, morphology and reproduction in Peziza.
- (2) Describe the morphology and reproduction in Alternaria.

Que-2 (B) Answer in brief: (Attempt any one) (04)

- (1) Write short notes on different types of spores in fungi.
- (2) Describe the process of somatogamous copulation in Peziza.

Que-2 (C) Answer in very short: (Attempt any three) (03)

- (1) Fill up the blanks: The ascocarps of the cup fungi are _____ (epigeal/Hypogaeal).
- (2) True or False: In Peziza, ascogenous hyphae developed after fertilization.
- (3) Name the causal organism of early blight of potato.
- (4) What is the basis of classification of deuteromycotina?
- (5) True or false: The conidia of Alternaria are multicellular structure.

Que-3 (A) Answer in details: (Attempt any one) (07)

- (1) Give an account of internal structure of Sphagnum sporophyte.
- (2) Give an illustrated account of the gametophyte of Pellia.

Que-3 (B) Answer in brief: (Attempt any one) (04)

- (1) Write a short note: Sporophyte of Pellia.
- (2) Describe the external features of the gametophores of Sphagnum.

- Que-3 (C) Answer in very short: (Attempt any three) (03)**
- (1) True or false: The monoecious species of *Pellia* are protandrous.
 - (2) Fill up the blanks: In *Pellia* the archegonia are born close to the apex and are placed _____.
 - (3) In which species of *Sphagnum*, retort cells are present in the main axis.
 - (4) Name the layer which separates operculum from rest of the capsule.
 - (5) True or false: In higher bryophytes the seta is functionally replaced by pseudopodium.
- Que-4 (A) Answer in details: (Attempt any one) (07)**
- (1) Describe the fructifications of *Calamites*.
 - (2) Describe the structure of *Marsilea* sporocarp with the help of suitable diagrams.
- Que-4 (B) Answer in brief: (Attempt any one) (04)**
- (1) Write a short note on *Lepidocarpon*.
 - (2) Describe the anatomy of rhizome of *Ophioglossum*.
- Que-4 (C) Answer in very short: (Attempt any three) (03)**
- (1) What is the nature of development of sporangium in *Ophioglossum*.
 - (2) Fill in the blanks: _____ is the family of *Rhynia*.
 - (3) When did the *Calamites* originate?
 - (4) Fill in the blanks: The generic name *Lepidophyllum* is assigned to the _____.
 - (5) What type of stele is observed in *Marsilea* rhizome?
- Que-5 (A) Answer in details: (Attempt any one) (07)**
- (1) Describe the symptoms, casual organism and control of Tikka disease of Groundnut.
 - (2) Describe the general symptoms of disease.
- Que-5 (B) Answer in brief: (Attempt any one) (04)**
- (1) Write short note on: Leaf curl of Papaya.
 - (2) What are systemic fungicides?
- Que-5 (C) Answer in very short: (Attempt any three) (03)**
- (1) What is the pathogenesis?
 - (2) Name a toxin secreted by *Alternaria solani*.
 - (3) What is necrosis?
 - (4) Name of fungus causing 'whip smut of sugarcane'.
 - (5) Give name of pathogen responsible for citrus canker.
