

B.Sc. Semester - 1 (CBCS) Examination
Oct/Nov-2025 (New Course)
BOTANY(CORE)

Time: 2:30 Hours**Marks:70****Instructions:**

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

-
- Que.1(A) Answer very shortly (04)
- (1) What is the location and function of the Meristoderm region in Sargassum?
 - (2) Internally, the antheridium of Sargassum initially contains a single _____ nucleus and a few chromatophores. The nucleus divides _____ and then _____ to form _____ numbers of haploid nuclei. (diploid, haplod, 32, meiotically, mitotically, 64).
 - (3) Which polysaccharide is present in Spirogyra as a slimy mass sheath around the filament?
 - (4) Define aplanospores of Spirogyra.
- Que.1(B) Answer shortly (Any one) (03)
- (1) Give the Whittaker's Five Kingdom sytem Classification
 - (2) Discuss Algae used in human welfare
- Que.1(C) Answer in detail (any one) (07)
- (1) Discuss the Oogonial structure of Sargassum algae.
 - (2) What are the scope of Botany?
- Que.2(A) Answer very shortly (04)
- (1) What is the difference between saprophytic and parasitic modes of nutrition?
 - (2) Define coenocytic mycelium.
 - (3) Explain haustoria
 - (4) What is a columella and where is it found?
- Que.2(B) Answer shortly (Any one) (03)
- (1) Explain the somatic structure of Mucor.
 - (2) Discuss the V.S. of Agaricus gills.
- Que.2(C) Answer in detail (Any one) (07)
- (1) Give the salient features of the subdivision Ascomycotina
 - (2) Describe the sexual reproduction in Mucor.
- Que.3(A) Answer very shortly (04)
- (1) In Bryophytes, is gamete production occurring through meiosis? True or false?
 - (2) Why does the morphological structure of Riccia appear as a rosette form?
 - (3) Bryophytes possess true vascular tissues. True or false?
 - (4) In Bryophytes, the gametophyte generation is _____ and independent. The sporophyte generation is very small, microscopic, and _____ on the gametophyte phase.
- Que.3(B) Answer shortly (Any one) (03)
- (1) Discuss Alternation of Generations
 - (2) Briefly state the vegetative reproduction in Riccia.

- Que.3(C) Answer in detail (Any one) (07)
- (1) Describe sporophytic structure of Riccia
 - (2) Describe the mature Antheridium and Archegonium of Riccia.
- Que.4(A) Answer very shortly (04)
- (1) State the role of stolons in Nephrolepis?
 - (2) When the meiosis is occurs in pteridophytes _____
 - (3) Prothallus represents sporophytic phase in a fern. True or False?
 - (4) Phloem is without _____ in pteridophytes.
- Que.4(B) Answer shortly (Any One) (03)
- (1) Describe the transvers section of Nephrolepis Petiole.
 - (2) Give the general chatacters of Pteridophytes.
- Que.4(C) Answer in detail (Any one) (07)
- (1) Describe the classification of pteridophytes.
 - (2) Discuss the internal structure of sporophytic phase of Nephrolepis.
- Que.5(A) Answer very shortly (04)
- (1) Why the seeds are naked in gymnosperms?
 - (2) Define transfusion tissue?
 - (3) In collaloid roots of cycas, which algae are found?
 - (4) The pollen grains of cycas are dispersed by
- Que.5(B) Answer shortly (Any one) (03)
- (1) Describe the L.S. of male cone.
 - (2) Describe the T.S. of young stem of Cycas.
- Que.5(C) Answer in detail (Any one) (07)
- (1) Describe the general characters of Gymnosperm.
 - (2) Describe T. S. of leaflet of Cycas.
