

B.Sc. Semester - 6 (CBCS) Examination
March/April-2026 (NEW COURSE)
Cryptogamic Botany & Gymno. (Core (New))

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

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

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- Que.1(A) Objective type questions. (04)
- (1) Which type of sporangia is produced only on the sporophytic plants in Ectocarpus?
 - (2) Why diatoms are golden brown in colour?
 - (3) Fill in the blanks: Caularpha belongs to _____ order.
 - (4) True or False: The oospore in coleochaete is surrounded by a Pseudoparenchymatous sheath.
- Que.1(B) Answer in brief (Attempt any one) (03)
- (1) Write a note on: Plurilocular sporangia of Ectocarpus.
 - (2) Explain: Spermatocarp of coleochaete.
- Que.1(C) 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.2(A) Objective type questions. (04)
- (1) Name the genera to whom perfect stages of penicillium has been assigned.
 - (2) Fill in the blanks: Yellow rust of wheat is caused by _____
 - (3) Who discovered phenomenon of heterothallism?
 - (4) Name sexually produced non-motile spores of endogenous origin in fungi.
- Que.2(B) Answer in brief (Attempt any one) (03)
- (1) Write a note on: Different types of spores in fungi.
 - (2) Give labelled diagrams of: Leaf T.S. through accidium.
- Que.2(C) Answer in details: (Attempt any one) (07)
- (1) Describe the process asexual reproduction in penicillium.
 - (2) Give an account of the Uredospore and Teleutospore stage with diagram in puccinia.
- Que.3(A) Objective type questions. (04)
- (1) Name the tissue which gives rise to spore mother cells in Anthoceros.
 - (2) True or False: In Anthoceros, the antheridia develop endogenously.
 - (3) What is the function of retort cells present in the axis of shagnum?
 - (4) Fill in the blanks: In the antheridial branches the antheridia are borne in ____ succession.
- Que.3(B) Answer in brief: (Attempt any one) (03)
- (1) Write a note on: Structure of sporophyte in Anthoceros.
 - (2) Write a note on: The leaves of sphagnum.
- Que.3(C) Answer in details: (Attempt any one) (07)
- (1) Describe the structure of sex organs in sphagnum.
 - (2) Describe: Evolutionary trends of sporophyte.
- Que.4(A) Objective type questions. (04)
- (1) Name the type of sporangial development in Marsilea.
 - (2) True or False: The roots of ophioglossum have mycorrhiza but no root hairs.
 - (3) What is the characteristic of the nodal anatomy of Ephedra?
 - (4) How the collar is formed in the Gnetum at the base of the male strobilus?
- Que.4(B) Answer in brief: (Attempt any one) (03)
- (1) Write a note on: Spore producing organs of ophioglossum.
 - (2) Write a note on: Male cone of Ephedra.

- Que.4(C) Answer in details: (Attempt any one) (07)
- (1) Write a note on the T.S. of Rhizome with labeled diagram in Marsilea.
 - (2) Describe the male and female strobilus of Gnetum.
- Que.5(A) Objective type questions. (04)
- (1) In which geological period Lepidodendron was found?
 - (2) What is the scientific name of giant horsetails?
 - (3) What was the characteristic of the outer cortex of Lyginopteris Stem.
 - (4) Fill in the blanks: The vegetative structure of Cycadeoidea is similar to _____
- Que.5(B) Answer in brief: (Attempt any one) (03)
- (1) Write a note on: Types of fossils.
 - (2) Write a note on: Rhynia.
- Que.5(C) Answer in details: (Attempt any one) (07)
- (1) Describe the morphology and anatomy of Lepidodendron.
 - (2) Describe the Spore producing organs of cordaitaceae (cordites).
