

B.Sc. Semester - 1 (CBCS) Examination
Feb/Mar. -2021 (OLD COURSE)
BOTANY (CORE)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

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- Q.1 Answer the following questions as per instruction. (04)
- (A) Answer in very short. (04)
1. Fill in the blank: in algae thick walled vegetative cells rich in food materials are known as _____
 2. Name the chlorophyll pigment commonly found in the members of the class chlorophyceae.
 3. True or False: Agar-Agar is extracted from Rhodophyceae members.
 4. What is the name of the branches which bear conceptacles *Sargassum*?
- (B) Answer in short. (any one) (02)
1. Write two characters of Kingdom Monera.
 2. Write notes on: Aplanospores in *Spirogyra*.
- (C) Answer in brief. (any one) (03)
1. Explain algae as bio fertilizers
 2. Describe scalariform conjugation in *Spirogyra*.
- (D) Answer in detail. (any one) (05)
1. Give a detail account of the male conceptacles of *Sargassum*.
 2. Describe the external structure of *Sargassum* thallus.
- Q.2 Answer the following questions as per instruction. (04)
- (A) Answer in very short. (04)
1. Name the septum in which septal pore is surrounded by parenthosomes.
 2. Fill in the blank: in *Agaricus* upper part of the fruiting body is called _____.
 3. True or False: Fumaric acid is commercially produced by *Rhizopus nigricans*.
 4. Name the hypha which bears a sporangium.
- (B) Answer in short. (any one) (02)
1. Write notes on: Sporangia of *Mucor*.
 2. Discuss somatic structure of *Mucor*.
- (C) Answer in brief. (any one) (03)
1. Explain with diagram: Button stage in *Agaricus*.
 2. Explain fungi in pharmaceuticals.
- (D) Answer in detail. (any one) (05)
1. Enumerate important characteristics of fungi.
 2. Describe internal structure of gill in *Agaricus*.
- Q.3 Answer the following questions as per instruction. (04)
- (A) Answer in very short. (04)
1. Fill in the blank: The sexual reproduction in bryophytes is always an advanced _____ type.
 2. True or false: The tuberculate rhizoids and scales are always absent in Anthocerotopsida.
 3. What is the dominant phase of the life cycle in Bryophytes?
 4. Name the class of *Riccia*.

- (B) Answer in short. (any one) (02)
1. Differentiate between simple and tuberculate rhizoids.
 2. Draw neat and labeled diagram: V.T.S. of *Riccia* thallus.
- (C) Answer in brief. (any one) (03)
1. Explain sporophyte of *Riccia*.
 2. Describe vegetative propagation in *Riccia*.
- (D) Answer in detail. (any one) (05)
1. Describe sexual reproductive organs in *Riccia*.
 2. Explain distinguishing features of bryophytes.
- Q.4 Answer the following questions as per instruction.
- (A) Answer in very short. (04)
1. Give the common name of *Nephrolepis*.
 2. In Pteridophytes spore on germination give rise to multicellular gametophytic bodies are known as _____.
 3. Which area in geological time scale is known as 'Age of seed ferns'.
 4. An epidermal membranous outgrowth covering sori in some fern is known as.
- (B) Answer in short. (any one) (02)
1. Write notes on : Ramenta.
 2. Discuss leaves in *Nephrolepis*.
- (C) Answer in brief. (any one) (03)
1. Explain sporangium of *Nephrolepis*.
 2. Write three important characters of sub-division Pterophyta.
- (D) Answer in detail. (any one) (05)
1. What is geological time scale? Describe the life in different eras.
 2. Explain sexual reproductive organ of *Nephrolepis*.
- Q.5 Answer the following questions as per instruction.
- (A) Answer in very short. (04)
1. True or False: The xylem in *Cycas* consist of four components Tracheids, Vessels, Xylem parenchyma and fibers.
 2. Name the terminal sterile portion of microsporophyll of *Cycas*.
 3. What is arrangement of the leaves on the stem in Gymnosperms?
 4. How many integuments are found in the *Cycas* ovule?
- (B) Answer in short. (any one) (02)
1. Write systematic position of *Cycas*.
 2. Draw labeled diagram: V.S. of *Cycas* ovule.
- (C) Answer in brief. (any one) (03)
1. Give a brief outline of classification of Gymnosperms studied by you.
 2. Explain morphology of leaves in *Cycas*.
- (D) Answer in detail. (any one) (05)
1. Explain important diagnostic feature of Gymnosperms.
 2. Describe the megasporophylls of *Cycas*.
