

B.Sc. Semester - 1 (CBCS) Examination
Oct/Nov-2023 (Syllabus Year - 2016)
BOTANY(CORE)

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) Answer the following questions as per instruction. (04)
Answer in very short.
 1. Give the term: In spirogyra the fusion of two adjacent of the same filaments.
 2. True or false: In algae sex organs are covered by jacket layer.
 3. Who proposed five kingdom classification?
 4. Name the shape of chloroplast in spirogyra.
- Que.1(B) Answer in short. (Any one) (02)
 1. Discuss: Algae as bio-fertilizer.
 2. Write two characters of kingdom protista.
- Que.1(C) Answer in brief. (Any one) (03)
 1. Describe the vegetative structure of the thallus in spirogyra.
 2. Describe the distinguishing features of chlorophyta.
- Que.1(D) Answer in detail. (Any one) (05)
 1. Describe the mode of scalariform conjugation in spirogyra.
 2. Give the illustrated account of the male conceptacle of sargassum.
- Que.2(A) Answer the following questions as per instruction. (04)
Answer in very short.
 1. Name the fertile layer present on the surface of the gills in *Agaricus*.
 2. Name the fungal tissue composing the pileus or bearing the hymenium of *agaricus*.
 3. Name the sterile part within the sporangium of *mucor*.
 4. Fill in the blank: _____ is a thread like structure constituting the mycelium of fungus.
- Que.2(B) Answer in short. (Any one) (02)
 1. Write the economic importance of fungi as a food.
 2. Explain: Primary mycelium of *Agaricus*.
- Que.2(C) Answer in brief. (Any one) (03)
 1. Write notes on: Sporangia of *mucor*.
 2. Explain: Fungi in pharmaceuticals.
- Que.2(D) Answer in detail. (Any one) (05)
 1. Describe the sexual reproduction in *mucor*.
 2. Describe internal structure of gill in *Agaricus*.
- Que.3(A) Answer the following questions as per instruction. (04)
Answer in very short.
 1. Which generation is more dominant in the life cycle of bryophytes.
 2. Fill in the blank: In class bryopsida spores on germination produce _____
 3. How many antheridia are present in the antherida chamber of *Riccia*?
 4. True or False: In class Bryopsida rhizoids are multicellular, branched with oblique septa.
- Que.3(B) Answer in short. (Any one) (02)
 1. Write notes on: Rhizoids of *Riccia*.
 2. Give the systematic position of *Riccia*.
- Que.3(C) Answer in brief. (Any one) (03)
 1. List the distinctive feature of class Hepeticopsida.
 2. Explain: Vegetative reproduction in *Riccia*.
- Que.3(D) Answer in detail. (Any one) (05)
 1. Explain: The sporophyte of *Riccia*.
 2. Explain: Male sexual reproductive organ in *Riccia*.

- Que.4(A) Answer the following questions as per instruction. (04)
Answer in very short.
1. What is a name given to a sporophyll which bears a sporangium containing smaller spore ?
 2. Name a place from where a sporangium opens in Nephrolepis.
 3. Which era is known as “ age of cycads”.
 4. Fill in a blank: In Nephrolepis, a cluster of sporangia is called_____.
- Que.4(B) Answer in short. (Any one) (02)
1. Explain:archegonium of nephrolepis.
 2. Write notes on: Mesozoic era.
- Que.4(C) Answer in brief. (Any one) (03)
1. Write notes on: hydathode.
 2. Describe external morphology of Nephrolepis.
- Que.4(D) Answer in detail. (Any one) (05)
1. Describe briefly: write the characteristic features of pteridophytes.
 2. Describe: spore bearing organ in Nephrolepis with diagram.
- Que.5(A) Answer the following questions as per instruction. (04)
Answer in very short.
1. Name the terminal sterile portion of the microsporophyll of cycas.
 2. How many integuments are found in the cycas ovule ?
 3. Name the female reproductive organs in cycas.
 4. In chamberlin classification of Gymnosperms is divided into two divisions. Name it.
- Que.5(B) Answer in short. (Any one) (02)
1. What is transfusion tissue ?
 2. Write notes on: pollination in cycas.
- Que.5(C) Answer in brief. (Any one) (03)
1. Describe structure of ovule in cycas.
 2. Explain: characters of division cycadophyta.
- Que.5(D) Answer in detail. (Any one) (05)
1. Explain Important diagnostic feature of Gymnosperms.
 2. Give an illustrated account of the microsporophyll of cycas .
