

B.Sc. Semester - 1 (CBCS) Examination
Feb/Mar. -2021 (NEW 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 question as per instruction.

A. Answer in very short: (04)

1. Give the technical term: Fusion of two similar gametes.
2. True or false : Members of class xenthophyceae have two anterior unequal flagella.
3. Which algae are suitable for membrane permeability experiments?
4. What is the name of the sterile cavities present on the secondary laterals of *Sargassum*?

B. Answer in brief (any one) (03)

1. Write notes on: male conceptacle in *Sargassum*.
2. Discuss asexual reproduction in *Spirogyra*.

C. Answer in detail (any one) (07)

1. Explain the external structure of thallus in *Sargassum*.
2. Describe the lateral conjugation in *Spirogyra*.

Q.2 Answer the following question as per instruction.

A. Answer in very short: (04)

1. Name a thread like structure constituting the mycelium of fungus.
2. Complete the statement: The surface of the gill is covered on both sides by fertile is called.....
3. Fill in the blank: *Mucor*, the specialized hyphal branch bearing zygosporangium is called.....
4. True or false: Citric acid commercially produced by *Aspergillus* spp.

B. Answer in brief (any one) (03)

1. Describe: Gills in *Agaricus*.
2. Write the economic importance of fungi as a food.

C. Answer in detail (any one) (07)

1. With the help of suitable diagrams describe sexual reproduction in *Mucor*.
2. Enumerate important characteristics of fungi.

Q.3 Answer the following question as per instruction.

A. Answer in very short: (04)

1. Fill in the blank: The number of venter canal cell in bryophytes is always.....
2. True or false: The rhizoids are always smooth walled in the members of anthocerotopsida.
3. The members of hepaticopsida are commonly known as.
4. Is the sporophyte of *Riccia* wholly dependent for its nutrition on the gametophyte?

B. Answer in brief (any one) (03)

1. Discuss the differences between hepaticopsida and bryopsida.
2. Draw neat and labeled diagram: V.T.S. of *Riccia* thallus passing through sporophyte.

C. Answer in brief (any one) (07)

1. Describe the distinguishing features of bryophytes.
2. Describe sexual reproductive organs in *Riccia*.

- Q.4 Answer the following question as per instruction. (04)
- A. Answer in very short:
1. What is the name given to the sporophyll which bears the sporangium containing smaller spore?
 2. Fill in the blank: Young fronds are.....coiled in pteropsida.
 3. An epidermal membranous outgrowth covering the Sori in the *Nephrolepis* is known as.
 4. What is geological time scale?
- B. Answer in brief (any one) (03)
1. Write notes on: Hydathode.
 2. Describe with labeled diagram: *Nephrolepis* prothalls.
- C. Answer in detail (any one) (07)
1. Describe spore bearing organ in *Nephrolepis* with diagrams.
 2. What is vascular cryptogam? Write the characteristic features of pteridophytes.
- Q.5 Answer the following question as per instruction. (04)
- A. Answer in very short
1. Name the female reproductive organs in *Cycas*.
 2. How many integuments are found in the *Cycas* ovule?
 3. Fill in the blank: In gymnosperms phloem is composed ofand phloem parenchyma.
 4. True or false: The gymnosperms lack fruits because they lack ovary.
- B. Answer in brief (any one) (03)
1. Discuss the external feature of *Cycas*.
 2. Explain the salient features of coniferophyta division.
- C. Answer in detail (any one) (07)
1. Give an illustrated account of male cone of *Cycas*.
 2. Enumerate important diagnostic features of gymnosperms.
