

B.Sc. Semester - 1 (CBCS) Examination
Jan/Feb.-2022 (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.**(A) Answer in very short. :**

04

- (1) Name the shape of chloroplast in *Spirogyra*.
- (2) Who proposed five kingdom classification?
- (3) True or false: In algae sex organs are covered by jacket layer.
- (4) Give the term: In *Spirogyra* the fusion of two adjacent of the same filaments.

(B) Answer in short (Any one)

02

- (1) Discuss: Algae as bio-fertilizer.
- (2) Write two characters of kingdom protista.

(C) Answer in brief (Any one)

03

- (1) Describe the distinguishing features of chlorophyta.
- (2) Describe the vegetative structure of the thallus in *Spirogyra*.

(D) Answer in detail. (Any one)

05

- (1) Give the illustrated account of the male conceptacle of sargassum.
- (2) Describe the mode of scalariform conjugation in *Spirogyra*.

Q.2 Answer the following questions as per instruction.**(A) Answer in very short.**

04

- (1) Fill in the blank: _____ is a thread like structure constituting the mycelium of fungus.
- (2) Name the sterile part within the sporangium of *Mucor*.
- (3) Name the fungal tissue composing the pileus or bearing the hymenium of *Agaricus*.
- (4) Name the fertile layer present on the surface of the gills in *Agaricus*.

(B) Answer in short (Any one):

02

- (1) Explain: Primary mycelium of *Agaricus*.
- (2) Write the economic importance of fungi as a food.

(C) Answer in brief. (Any one):

03

- (1) Write notes on: Sporangia of *Mucor*.
- (2) Explain: Fungi in pharmaceuticals.

(D) Answer in detail. (Any one)

05

- (1) Describe internal structure of gill in *Agaricus*.
- (2) Describe the sexual reproduction in *Mucor*.

Q.3 Answer the following questions as per instruction.**(A) Answer in very short.**

04

- (1) True or False: In class Bryopsida rhizoids are multicellular, branched with oblique septa.
- (2) How many antheridia are present in the antherida chamber of *Riccia*?
- (3) Fill in the blank: In class bryopsida spores on germination produce _____
- (4) Which generation is more dominant in the life cycle of bryophytes.

(B) Answer in short. (Any one)

02

- (1) Give the systematic position of *Riccia*.
- (2) Write notes on: Rhizoids of *Riccia*.

(C) Answer in brief. (Any one):

03

- (1) Explain: Vegetative reproduction in *Riccia*.
- (2) List the distinctive feature of class Hepeticopsida.

(D) Answer in detail. (Any one):

05

- (1) Explain: The sporophyte of *Riccia*.
- (2) Explain: Male sexual reproductive organ in *Riccia*.

Q.4 Answer the following questions as per instruction.

(A) Answer in very short.

04

- (1) Fill in the blank: In *Nephrolepis*, a cluster of sporangia is called _____
- (2) Which era is known as “age of cycads”.
- (3) Name the place from where the sporangium opens in *Nephrolepis*.
- (4) What is the name given to the sporophyll which bears the sporangium containing smaller spore ?

(B) Answer in short. (Any one)

02

- (1) Write notes on: Mesozoic era.
- (2) Explain: archegonium of *Nephrolepis*.

(C) Answer in brief. (Any one)

03

- (1) Describe external morphology of *Nephrolepis*.
- (2) Write notes on: hydathode.

(D) Answer in detail. (Any one):

05

- (1) Describe: spore bearing organ in *Nephrolepis* with diagram.
- (2) Describe briefly: write the characteristic features of pteridophytes.

Q.5 Answer the following questions as per instruction.

(A) Answer in very short.

04

- (1) In chamberlain classification of Gymnosperms is divided into two divisions. Name it.
- (2) Name the female reproductive organs in *Cycas*.
- (3) How many integuments are found in the *Cycas* ovule ?
- (4) Name the terminal sterile portion of the microsporophyll of *Cycas*.

(B) Answer in short. (Any one)

02

- (1) Write notes on: pollination in *Cycas*.
- (2) What is transfusion tissue ?

(C) Answer in brief (Any one)

03

- (1) Explain: characters of division *cycadophyta*.
- (2) Describe structure of ovule in *Cycas*.

(D) Answer in detail (Any one)

05

- (1) Give an illustrated account of the microsporophyll of *Cycas* .
- (2) Explain Important diagnostic feature of Gymnosperms.
