

B.Sc. Semester - 1 (CBCS) Examination
Oct/Nov. -2019 (OLD COURSE)
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 in very short. (04)
- (i) **True or false:** In algae sex organs are covered by jacket layer.
 - (ii) Give the name of five kingdoms given by Whittakers classification of living organism.
 - (iii) Name the branch which bears conceptacles in *Sargassum*.
 - (iv) **Give the term:** In *Spirogyra* the fusion of two adjacent cell of the same filaments.
- Que-1 (B)** Answer in short. (Any one) (02)
- (i) **Discuss:** Algae as bio-fertilizer.
 - (ii) Write two characters of kingdom Monera.
- Que-1 (C)** Answer in brief. (Any one) (03)
- (i) Describe the distinguishing features of Phaeophyta (Brown algae.)
 - (ii) **Explain:** The mode of scalariform conjugation in *Spirogyra*.
- Que-1 (D)** Answer in detail. (Any one) (05)
- (i) Give the illustrated account of the male conceptacle of *Sargassum*.
 - (ii) Describe the asexual reproduction in *Spirogyra*.
- Que-2 (A)** Answer in very short. (04)
- (i) **Fill in the blank:** _____ is a thread like structure constituting the mycelium of fungus.
 - (ii) Name the sterile part within the sporangium of *Mucor*.
 - (iii) Name the fungal tissue composing the pileus or bearing the hymenium of *Agaricus*.
 - (iv) Name the scientific term for the fruiting body of Basidiomycetes.
- Que-2 (B)** Answer in short. (Any one) (02)
- (i) Write economic importance of fungi in baking industries.
 - (ii) Give systematic position of *Mucor*.
- Que-2 (C)** Answer in brief. (Any one) (03)
- (i) **Explain:** asexual reproduction by sporangiospores or aplanospores in *Mucor*.
 - (ii) Explain with diagram: Button stage in *Agaricus*.
- Que-2 (D)** Answer in detail. (Any one) (05)
- (i) **Explain:** Internal structure of gills in *Agaricus*.
 - (ii) With the help of suitable diagrams describe the sexual reproduction in *Mucor*.
- Que-3 (A)** Answer in very short. (04)
- (i) **True or false:** The sporophyte of *Riccia* is represented by only capsule.
 - (ii) Which generation is more dominant in the life cycle of bryophytes.
 - (iii) **Fill in the blank:** In class bryopsida spores on germination produce ____.
 - (iv) Arrange the following cells of archegonia of *Riccia* from base to apex: Neck canal cell. Cover cell, Venter canal cell, Egg cell.

- Que-3 (B) Answer in short. (Any one)** (02)
- Write notes on:** Rhizoids of *Riccia*.
 - Explain any one method of vegetative reproduction in *Riccia*.
- Que-3 (C) Answer in brief. (Any one)** (03)
- List the distinctive features of class Hepeticopsida.
 - Draw neat and labeled diagram of V.T.S. of vegetative thallus of *Riccia*.
- Que-3 (D) Answer in detail. (Any one)** (05)
- Explain:** Male sexual reproductive organ in *Riccia*.
 - Describe general characters of the class Anthocerotopsida.
- Que-4 (A) Answer in very short.** (04)
- True or false:** Pteridophytes are also known as vascular cryptogamous.
 - Give the name of the structure formed by the germinating *Nephrolepis* spores.
 - Fill in the blank:** In *Nephrolepis*, a cluster of sporangia is called _____.
 - Which era is known as 'age of cycads'.
- Que-4 (B) Answer in short. (Any one)** (02)
- Write notes on:** Scale (Ramenta) in *Nephrolepis*.
 - Write notes on:** Stolon in *Nephrolepis*.
- Que-4 (C) Answer in brief. (Any one):** (03)
- Describe Devonian period of Palaeozoic era.
 - Write notes on:** External characters of *Nephrolepis*.
- Que-4 (D) Answer in detail. (Any one)** (05)
- Explain:** Spore bearing organ in *Nephrolepis*.
 - Describe briefly:** Importance characters of pteridophyta.
- Que-5 (A) Answer in very short.** (04)
- What is arrangement of leaves on the stem of gymnosperms?
 - Which type of plant is cycas? Monoecious or Dioecious.
 - How many integument present in ovule of cycas?
 - Fill in the blank:** Chamberlin(1934) divided the Gymnosperms into two sub-classes: _____ and _____
- Que-5 (B) Answer in short. (Any one)** (02)
- Draw labeled diagram:** V. I. S. of Cycas ovule.
 - Write notes on:** Pollination in *Cycas*.
- Que-5 (C) Answer in brief. (Any one)** (03)
- Explain:** Importance characteristic of cycadophyta.
 - Describe morphology of foliage leaves in *Cycas*.
- Que-5 (D) Answer in detail. (Any one)** (05)
- Give an illustrated account of the megasporophylls of *Cycas*.
 - Enumerate important diagnostic features of gymnosperms.
