



RN-003-001509

Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

February - 2019

B - 501 : Botany

(Cryptogamic Botany and Plant Pathology)

(Old Course)

Faculty Code : 003

Subject Code : 001509

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :**
- (1) This question paper contains three questions. All questions are compulsory
 - (2) Write answers of all the questions in main answer sheet.
 - (3) Draw neat and labelled diagram wherever necessary.
 - (4) Figures to the right side indicate full marks for the questions.

1 Objective type questions : 20

- (1) The oospore of Coleochetae is surrounded by a _____ sheath.
- (2) Heterothallism in fungi was discovered by _____
- (3) The basal cell of Aspergillus from where conidiophore arises is known as :
- (4) What is the name of fruiting body of Aspergillus? .
- (5) _____ chemical used for killing fungal pathogens.
- (6) Sporangia of Ophioglossum are seen in the form of a _____
- (7) Aspergillus belongs to _____ subdivision.
- (8) The name of the causal organisms of whip smut of sugarcane is _____
- (9) Define - Necrosis.
- (10) _____ algae possess coenocytic, branched thallus.
- (11) Sphagnum is commonly known as _____

- (12) Calamites plant possess _____ height.
- (13) What name is given to the spore producing organ of Marsilea?
- (14) The common name of Isoetes is :
- (15) Mention True or False: In Isoetes, Sporophyll possess sporangia.
- (16) The male sex organ of Chara is known as _____
- (17) Which layer is surrounded by sorus of Marsilea?
- (18) The cell wall of diatom is composed of:
- (19) Spore sac possess _____ shape in Sphagnum.
- (20) How many cover cells are present in the archegonium of Sphagnum?

- 2** (A) Answer in short : (Any **Three**) **6**
- (1) Give the classification of Coleochetae with reasons.
 - (2) Write any four economic importance of diatoms.
 - (3) Mention agricultural uses of Trichoderma.
 - (4) Write the process of dehiscence of capsule in Sphagnum.
 - (5) Write morphological features of leaf of Isoetes.
 - (6) Explain : Occurrence of Chara.
- (B) Give the Answer : (Any **Three**) **9**
- (1) Describe asexual reproduction in Aspergillus.
 - (2) Explain - L.S. of globule of Chara.
 - (3) Give an account of the internal structure of Sphagnum axis.
 - (4) Draw a labelled diagram of Ophioglossum root.
 - (5) Give the disease symptoms of Tikka disease of groundnut.
 - (6) Write a note on archegonia of Pellia.
- (C) Answer in detail : (Any **Two**) **10**
- (1) Describe sexual reproduction in Aspergillus.
 - (2) Explain the vegetative reproduction in Chara.
 - (3) Give an account of internal structure of Sphagnum sporophyte.
 - (4) Describe - Marsilea sporocarp.
 - (5) Describe internal structure of Caulerpa thallus.

- 3 (A) Answer in short : (Any Three) 6**
- (1) Caulerpa has been placed in the order Siphonales. Why?
 - (2) By means of labelled diagram only illustrate the life history of Isoetes.
 - (3) Draw a labelled diagram of Pellia antheridium.
 - (4) Explain the internal structure of Sphagnum leaf.
 - (5) Write a note on: Different spores of fungi.
 - (6) Write the occurrence of Ectocarpus.
- (B) Give the Answer : (Any Three) 9**
- (1) Write an essay on heterothallism in fungi.
 - (2) Describe internal structure of Marsilea petiole.
 - (3) Give the disease symptoms of Red rot of sugar cane.
 - (4) Describe the morphological features of Ophioglossum spike.
 - (5) Explain the structure of Nucule with diagram.
 - (6) Write a short note on Lepidocarpon.
- (C) Answer in detail : (Any Two) 10**
- (1) Describe internal structure of Marsilea root.
 - (2) Explain biological control of plant pathogens.
 - (3) Explain external and internal structure of Pellia.
 - (4) Explain the asexual reproduction in Coleochetae.
 - (5) Describe the symptoms, causal organism and control of Citrus canker.
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