



MCP-003-001509

Seat No. _____

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

May / June - 2018

Botany : Paper - 501

(Cryptogamic Botany & Plant Pathology)

Faculty Code : 003

Subject Code : 001509

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

[Total Marks : 70

- Instructions :** (1) Write answers of all questions in main answer book.
(2) Draw neat and labeled diagrams wherever necessary.
(3) Figures to the right side indicate full marks for the questions.

- 1 Give the correct answer : **20**
- (1) Which organs produced aecidiospore in puccinia ?
 - (2) Which shaped of spore sac in Sphagnum capsule?
 - (3) How many neck canal cells range in Pellia?
 - (4) Which layer is surrounded by sorus of Marsilea?
 - (5) Calamites appeared in which period?
 - (6) Heterothallism in fungi was discovered by
 - (7) Sphagnum is commonly known as
 - (8) The female sex organs in Chara is known as
 - (9) What is sporadic disease? Defination.
 - (10) Sporangia of Ophioglossum are seen in the form of a
 - (11) How many major eras in geological history of earth?
 - (12) Rhynia belongs to a geological period known as
 - (13) How many number of microspores produced per microsporangium in Marsilea ?
 - (14) Write the occurrence of chara.

- (15) Black stem of rust of is found on
- (16) Which types of spore developed in ectocarpus ?
- (17) The chemical used for killing fungal pathogens are known as
- (18) The name of the causal organisms of whip smut of sugarcane is
- (19) Write the name of sex reproductive organs of Aspergillus.
- (20) How many height of calamites plant?

- 2** (A) Give the Answer in short : (Any **Three**) **6**
- (1) Describe the V.S. of Pellia capsule structure.
 - (2) Draw the label diagram: Spermocarp of coleochaete.
 - (3) Caulerpa has been placed in the order Siphonales. Why?
 - (4) Describe sexual reproduction in chara.
 - (5) Draw the label diagrams: Rhizome T.S. of Marsilea.
 - (6) Explain Cell structure in Ectocarpus.
- (B) Give the Answer : (Any **Three**) **9**
- (1) Describe the sex evolution in algae.
 - (2) Draw the label diagram of L.S. of sporangia in Isoetes.
 - (3) Explain the gametophytes in Isoetes.
 - (4) Explain: L.S. Globule of Chara.
 - (5) Give the classification of Calamites.
 - (6) Explain the external features of Rhynia.
- (C) Give the Answer in brief : (Any **Two**) **10**
- (1) Explain any four spores of fungi.
 - (2) Describe cell structure of cell wall and reproduction in Diatoms.
 - (3) Draw the T.S. of petiole with label diagrams in Marsilea.
 - (4) Explain the life cycle of Ophioglossum with suitable diagrams.
 - (5) Write the ten symptoms of plant diseases.

- 3** (A) Give the Answer in short : (Any **Three**) **6**
- (1) Write the use of Trichoderma.
 - (2) Explain the vegetative reproduction in chara.
 - (3) Describe the leaf sac in Lepidodendron.
 - (4) Establish that Ectocarpus belongs to Phaeophyceae.
 - (5) Describe smut.
 - (6) Write short notes on Sphagnum. leaf.
- (B) Give the Answer in brief : (Any **Three**) **9**
- (1) Describe the structure of the mature prothallus with label diagrams in Ophioglossum.
 - (2) Write short note: trichoderma.
 - (3) Write the differences between epidemic and endemic disease. (Six points)
 - (4) Write short note: Sporophyte of Sphagnum.
 - (5) Write the six symptoms: Tikka Disease of Groundnuts.
 - (6) Give the anatomy of leaf in Ophioglossum with label diagrams.
- (C) Describe in detail : (Any **Two**) **10**
- (1) Give the morphology and anatomy of Lepidodendron.
 - (2) Explain the heterothallism in fungi.
 - (3) Write the ten economic importances of Diatoms.
 - (4) Sexual reproduction in coleochaet.
 - (5) Describe Different methods of Plant disease control.
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