



PAP-003-001509

Seat No. _____

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

October / November - 2018

Botany : B - 501 Cryptogamic botany & plant pathology

Faculty Code : 003

Subject Code : 001509

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

[Total Marks : 70

- Instructions :** (1) The question paper contains three questions.
(2) Draw neat and labelled diagram whenever necessary.
(3) Figures to the right indicate marks.

- 1** Give short answers of the following questions : **20**
- (1) Name the algae which consist coenocytic branched and diploid thallus.
 - (2) The female sex organs in chara is known as _____
 - (3) Diatoms is exhibited by _____ formations.
 - (4) Write the name of scientist, who discovered heterothallism in fungi ?
 - (5) What is the height of calamites plant ?
 - (6) In the lifecycle of ectocarpus meiosis occurs during zoospore formation in which type of sporangia ?
 - (7) Write the habitat of caulerpa algae.
 - (8) What is the number of microspore produced by marsilea microsporangium ?
 - (9) Black stem of rust found on _____ host plant.
 - (10) Define: Fungicides.
 - (11) Write the name of the causal organisms of whip smut of sugarcane ?
 - (12) Write the name of disease caused by bacteria?

- (13) Algae coleochaete belongs to which order ?
- (14) Define : Heterospore
- (15) Define : Plant pathology.
- (16) Write the division and class of sphagnum.
- (17) Write the habitat of chara.
- (18) Rhynia belongs to geological period called _____ period.
- (19) Write the symptoms of the red rot diseases of sugarcane.
- (20) In pellia, archegonia of the cluster are surrounded by which part ?

- 2** (a) Give the answers in short : (any **three**) **6**
- (1) Describe the vegetative reproduction in chara.
 - (2) Write the use of Trichoderma.
 - (3) Define: smut.
 - (4) Write the character of Phaeophyceae
 - (5) Explain : Lepidodendron.
 - (6) Write short notes on Sphagnum leaf.
- (b) Give the answers in brief : (any **three**) **9**
- (1) Write short notes : citrus canker.
 - (2) Write the differences between epidemic and endemic disease : (any six point)
 - (3) Give the anatomy of leaf in Ophioglossum with label diagrams.
 - (4) Describe mature Prothallus of Ophioglossum.
 - (5) Explain : tikka diseases of Ground nuts.
 - (6) Explain: Sporophyte of Sphagnum.
- (c) Describe in detail : (any **two**) **10**
- (1) Explain the heterothallism in fungi.
 - (2) Sexual reproduction in coleochaet.
 - (3) Describe different methods of plant disease control.
 - (4) Write note on lepidodendron.
 - (5) Write the ten economic importances of diatoms.

- 3** (a) Give the answers in short : (any **three**) **6**
- (1) Draw the label diagrams : rhizome T.S. of Marsilea.
 - (2) Draw the label diagram : spermocarp of coleochaete.
 - (3) Explain cell structure in ectocarpus.
 - (4) Describe the V.S. of peltia capsule structure
 - (5) Caulerpa has been placed in the order siphonales. Why ?
 - (6) Describe sexual reproduction in chara.
- (b) Give the answers in brief : (any **three**) **9**
- (1) Explain the gametophytes in isoetes.
 - (2) Explain: L. S. globule of chara.
 - (3) Explain the external features of Rhynia.
 - (4) Give the classification of calamites.
 - (5) Describe the sex evolution in algae.
 - (6) Draw the label diagrams of L.S. of sporangia in isoetes.
- (c) Answer in detail : (any **two**) **10**
- (1) Draw the T.S. of petiole with label diagrams in marsilea.
 - (2) Describe cell structure of cell wall and reproduction in diatoms.
 - (3) Explain any four spores of fungi.
 - (4) Write the ten symptoms of plant diseases.
 - (5) Explain the life cycle of Ophiglossum with suitable diagrams.
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