



JV-003-1015037

Seat No. _____

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

October - 2019

Botany : B - 501

(Cryptogamic Botany & Plant Pathology) (New Course)

Faculty Code : 003

Subject Code : 1015037

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

[Total Marks : 70

- Instructions :**
- (1) Attempt all the questions.
 - (2) Answer with neat and labelled diagrams wherever necessary.
 - (3) Figures to the right side indicate total marks for the question.

- 1 (a) Answer the following objective type questions : 4
- (1) Which algae possesses coenocytic thallus?
 - (2) The neck of *Coleochetae* archegonia is known as _____.
 - (3) The female sex organ of *Chara* is known as _____.
 - (4) According to pigment *Ectocarpus* is _____ algae.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Give the classification of *Coleochetae* with reasons.
- OR**
- (2) Draw a labelled diagram of cell structure of *Ectocarpus*.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe the internal structure of *Caulerpa* thallus.
- OR**
- (2) Explain asexual reproduction in *Ectocarpus*.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Describe vegetative reproduction in *Chara*.
- OR**
- (2) Explain sexual reproduction in *Coleochetae*.

- 2 (a) Answer the following objective type questions : 4
- (1) Fruiting body of *Peziza* is called _____.
 - (2) Name the branches which bear conidia in *Aspergillus*.
 - (3) Which type of spore is produced during asexual reproduction of *Aspergillus* ?
 - (4) Mention true or false: In *Peziza*, hyphae is coenocytic.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain the life cycle of *Peziza* with the help of schematic presentation only.
- OR**
- (2) Write vegetative structure of *Alternaria*.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe different spores of fungi.
- OR**
- (2) Explain sexual reproduction in *Alternaria*.
- (d) Write note on : (any 1 out of 2) 5
- (1) Describe - Apothecium of *Peziza*.
- OR**
- (2) Give classification of *Peziza* with reasons.
- 3 (a) Answer the following objective type questions : 4
- (1) Spore mother cell of *Sphagnum* is _____.
 - (2) The antheridia of *Pellia* are open on dorsal surface through _____.
 - (3) In *Sphagnum*, the antheridia are borne in _____ succession on antheridial branches.
 - (4) Mention true or false : spore of *Pellia* is diploid.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Draw a labelled diagram about the internal structure of *Sphagnum* axis.
- OR**
- (2) Give the systematic position of *Pellia*.

- (c) Answer in detail : (any 1 out of 2) 3
 (1) Explain internal structure of *Sphagnum* leaf.
OR
 (2) Write note on : Dehiscence of capsule in *Pellia*.
- (d) Write note on : (any 1 out of 2) 5
 (1) Describe the sex organs of *Sphagnum*.
OR
 (2) Explain the internal structure of mature sporophyte of *Pellia*.
- 4 (a) Answer the following objective type questions : 4
 (1) Which type of compound leaf is observed in *Marsilea* ?
 (2) Sporangia of *Ophioglossum* is seen in form of :
 (3) Rhynia belongs to geological period known as :
 (4) Mention true or false : *Ophioglossum* produces one leaf each year.
- (b) Answer in brief : (any 1 out of 2) 2
 (1) Explain internal structure of *Marsilea* leaf.
OR
 (2) Give the systematic position of *Ophioglossum*.
- (c) Answer in detail : (any 1 out of 2) 3
 (1) Draw the T.S. of Rhizome with labelled diagram in *Marsilea*.
OR
 (2) Describe mature prothallus of *Ophioglossum*.
- (d) Write note on : (any 1 out of 2) 5
 (1) Explain - Internal structure of *Marsilea* petiole.
OR
 (2) Describe the female gametophyte of *Ophioglossum*.

- 5 (a) Answer the following objective type questions : 4
- (1) Write the causal organism of whip smut of sugarcane.
 - (2) Define: Necrosis.
 - (3) Write the causal organism of Red rot of sugarcane.
 - (4) Mention true or false : Leaf curl of Papaya is bacterial disease of plant.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Write important symptoms of whip smut of sugarcane.
- OR**
- (2) Write controlling measures of Leaf curl of Papaya.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Write important symptoms of red root of sugarcane.
- OR**
- (2) Explain different methods of plant disease control.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain six controlling measures of Citrus canker.
- OR**
- (2) Describe Tikka disease of ground nut.
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