



PAP-003-1015037 Seat No. _____

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

October / November - 2018

Botany : B - 501

(Cryptogamic Botany and 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 draw neat and labelled diagram wherever necessary.
(3) Figures to the right side indicated total marks for the questions.

- 1 (A) Answer the following Objective type questions : 4
(1) The female sex organ in *Chara* is known as _____.
(2) The spermiocarp, of *Coleochatae* produces _____.
(3) _____ species of *Chara* shows vegetative reproduction by amorphous bulbils.
(4) The plant body of *caulerpa* unicellular, multinucleate is it true or false ?
- (B) Answer in brief : (any **one** out of two) 2
(1) Explain internal structure of *Caulerpa* thallus.
OR
(2) Write about the cell structure of *Ectocarpus*.
- (C) Answer in detail : (any **one** out of two) 3
(1) Explain globule of *Chara* with diagram.
OR
(2) Draw the label diagram : Spermiocarp of *Coleochatae*.

- (D) Write a note on : (any **one** out of two) 5
- (1) Describe sexual reproduction in *Coleochetae*.
- OR**
- (2) Explain asexual reproduction in *Ectocarpus*.
- 2** (A) Answer the following Objective type questions : 4
- (1) *Peziza* is _____ shaped fungi
 - (2) Early blight of potato is caused by :
 - (3) Write early symptoms of early blight of potato.
 - (4) Mention true or false : In *Peziza*, ascogenous hyphae developed after fertilization.
- (B) Answer in brief : (any **one** out of two) 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 **one** out of two) 3
- (1) Give classification of *Peziza* with reasons.
- OR**
- (2) Explain sexual reproduction in *Alternaria*.
- (D) Write a note on : (any **one** out of two) 5
- (1) Describe - Apothecium of *Peziza*.
- OR**
- (2) Describe different spores of fungi.
- 3** (A) Answer the following Objective type questions : 4
- (1) In *Pellia*, the neck of archegonium is made of _____ vertical row of cells.
 - (2) What do you mean by gametophytic phase of bryophyte?
 - (3) In *Sphagnum*, the antheridia are borne in _____ succession on antheridial branches.
 - (4) The masses of sterile cells located at the base of the capsule of *Pellia* are known as.

- (B) Answer in brief : (any **one** out of two) 2
 (1) Describe the V.S. of *Pellia* capsule structure.
OR
 (2) Give the systematic position of *Sphagnum*.
- (C) Answer in detail : (any **one** out of two) 3
 (1) Write short note on Sphagnum leaf.
OR
 (2) Write the external features of *Pellia*.
- (D) Write a note on : (any **one** out of two) 5
 (1) Describe the sex organs of *Pellia*.
OR
 (2) Explain the internal structure of mature sporophyte (*Sphagnum*).
- 4 (A) Answer the following Objective type questions : 4
 (1) In *Cingularia*, bracts were present _____ the sporangiophores.
 (2) Write the occurrence of *Marsilea*.
 (3) Sporangia of *Ophioglossum* are seen in the form of a _____
 (4) How many flagella are present in each antherozoid of *Ophioglossum* ?
- (B) Answer in brief : (any **one** out of two) 2
 (1) Explain internal structure of *Marsilea* leaf.
OR
 (2) Write the morphology of *Ophioglossum*.
- (C) Answer in detail : (any **one** out of two) 3
 (1) Write a note on Spermocarp of *Marsilea*.
OR
 (2) Write a note on the discovery and external morphology of *Rhynea*.

- (D) Write a note on : (any **one** out of two) 5
(1) Explain - Internal structure of *Marsilea* petiole.
OR
(2) Describe the spore producing organs of *Ophioglossum*.
- 5 (A) Answer the following Objective type questions : 4
(1) Mention True or False :- Citrus canker is bacterial disease.
(2) Disappearance of chlorophyll in infected plants is called _____.
(3) The disease symptoms give a burnt appearance in:
(4) Which causal organism of whip smut of sugarcane?
- (B) Answer in brief : (any **one** out of two) 2
(1) Write important symptoms of red rot of sugarcane.
OR
(2) Write controlling measures of Leaf curl of Papaya.
- (C) Answer in detail : (any **one** out of two) 3
(1) Describe whip smut of sugarcane.
OR
(2) Describe Citrus canker.
- (D) Write a note on : (any **one** out of two) 5
(1) Explain - Tikka disease of ground nut.
OR
(2) Describe White smut of sugarcane.
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