



BCF-003-1015037 Seat No. _____

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

August – 2021

B - 501 : Botany

(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 any five questions out of the following 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 : 04

- (1) Which alga possess unilocular sporangia?
- (2) *Caulerpa* belongs to order.
- (3) Male sex organ of *Chara* is also known as:
- (4) Mention true or false: *Ectocarpus* zoospore bears two unequal flagella.

(B) Write the occurrence of *Caulerpa*. 02

(C) Explain vegetative reproduction in *Chara*. 03

(D) Write asexual reproduction in *Ectocarpus*. 05

2. (A) Answer the following Objective type questions : 04

- (1) The neck of archegonia in *Coleochetae* is known as:
- (2) Name the one species of *Coleochetae* in which heterotrichous habitat is well represented.
- (3) *Ectocarpus* belongs to Class.
- (4) type of chloroplast is present in *Chara*.

(B) Give the classification of *Ectocarpus* with reasons. 02

(C) Write a note on cell structure of *Chara*. 03

(D) Explain sex organs of *Chara* with diagram. 05

- 3. (A) Answer the following Objective type questions :** **04**
- (1) *Peziza* belongs to which fungal classes?
 - (2) Which fungus is known as cup fungi?
 - (3) Mention true or false : In *Peziza*, ascogenous hyphae developed after fertilization.
 - (4) Define – Zoospore.
- (B) Write vegetative structure of *Alternaria*.** **02**
- (C) Give information about occurrence of *Alternaria*** **03**
- (D) Describe Apothecium of *Peziza*.** **05**
- 4.(A) Answer the following Objective type questions :** **04**
- (1) *Alternaria* belongs to class.
 - (2) Early blight of potato is caused by.....
 - (3) Mention true or false : In *Peziza*, hyphae is coenocytic.
 - (4) Draw a labelled diagram of conidia of *Alternaria*.
- (B) Explain the life cycle of *Peziza* with the help of schematic presentation only.** **02**
- (C) Write the systematic position of *Peziza* with reasons.** **03**
- (D) Describe reproduction in *Alternaria*.** **05**
- 5.(A) Answer the following Objective type questions :** **04**
- (1) The masses of sterile cells located at the base of the capsule of *Pellia* are known as:
 - (2) The common name of *Sphagnum*is.....
 - (3) How many neck canal cells are present in the archegonium of *Pellia*?
 - (4) Give the Name of the branches which are found in *Sphagnum*.
- (B) Write a note on *Pellia* archegonia.** **02**
- (C) Explain the internal structure of *Sphagnum* axis.** **03**
- (D) Describe – Internal structure of *Pellia* thallus.** **05**
- 6. (A) Answer the following Objective type questions :** **04**
- (1) What do you mean by gametophytic phase of bryophyte?
 - (2) Mention true or false: *Pellia* possess tuberculate rhizoids on its ventral surface.
 - (3) Name the bryophyte in which retort cells are found.
 - (4) *Pellia* belong toclass.

- (B) Write note on *Pellia* antheridia. 02
- (C) Write a note on – Dehiscence of capsule in *Sphagnum*. 03
- (D) Describe – Internal structure of *Pellia* sporophyte 05
7. (A) Answer the following Objective type questions : 04
- (1) Sporangia in *Ophioglossum* are seen in the form of a
 - (2) How many flagella are present in each antherozoids of *Ophioglossum*?
 - (3) How many number of microspores produced per microsporangium in *Marsilea*.
 - (4) Mention true or false: *Marsilea* is heterosporous species.
- (B) Write systematic position of *Marsilea*. 02
- (C) Explain the internal structure of *Ophioglossum* rhizome. 03
- (D) Describe – Sporocarp of *Marsilea*. 05
8. (A) Answer the following Objective type questions : 04
- (1) The archegonium of *Ophioglossum* has neck canal cells.
 - (2) Which is dominant phase in life cycle of *Marsilea*?
 - (3) In Cingularia, bracts were present the sporangiophores.
 - (4) Mention true or false: *Marsilea* is generally occurs in dry regions.
- (B) Give information about morphology of *Ophioglossum* 02
- (C) Explain the internal structure of *Ophioglossum* rhizome. 03
- (D) Describe – *Ophioglossum* spike. 05
9. (A) Answer the following Objective type questions : 04
- (1) Disappearance of chlorophyll in infected plant is called
 - (2) Write causal organisms of whip smut of sugarcane.
 - (3) The chemical used for killing fungal pathogens are known as:
 - (4) Define – Necrosis.
- (B) Write controlling measures of Leaf curl of Papaya. 02
- (C) Write the symptoms of Red rot of sugarcane. 03
- (D) Describe the symptoms, causal organisms and control of Citrus canker. 05

- 10. (A) Answer the following Objective type questions :** **04**
- (1) Mention true or false: Red rot of sugar cane is bacterial disease.
 - (2) Bordeaux mixture consist of :
 - (3) The disease symptoms give a burnt appearance in :
 - (4) Write the causal organism of Red rot of sugar cane.
- (B) Write controlling measures of Red rot of sugar cane. 02**
- (C) Describe Different methods of Plant disease control. 03**
- (D) Describe the symptoms, causal organisms and control of Tikka disease of ground nut. 05**
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