



Seat No. _____

H AJ-003-2013006
B. Sc. (Sem. III) (CBCS)
(W.E.F. 2019) Examination
May - 2023
B-301 : Plant Diversity - 2

Faculty Code : 003
Subject Code : 2013006

Time : $2\frac{1}{2}$ / Total Marks : 70

- 1 A. Objective type questions : (All are compulsory) 4
1. The cystocarp is consist of _____.
 2. What is the function of eye-spot ?
 3. Give the example of pseudoparenchymatous forms of algae.
 4. Write the names of Nostoc species occur in symbiotic association with Fungi.
- B. Answer in Brief : (Any. 1 out of 2) 2
1. What is coenobium forms
 2. Differentiate between Siphonaceous and filamentous thallus.
- C. Answer in Detail : (Any 1 out of 2) 3
1. Draw the well labelled diagram of Ultra structured Eukaryotic algal cell.
 2. Write note on: Algae causing biological disturbances.
- D. Write a Note on : (Any 1 out of 2) 5
1. Explain : The methods of reproductions in Nostoc.
 2. Explain : Post fertilization in Batrachospermum.
- 2 A. Objective type questions : (All are compulsory) 4
1. Maximum how many bud scar noted on Yeast ?
 2. Define: Isthmus
 3. By whom studied first yeast cell ?
 4. What is lomosomes ?

- B. Answer in Brief : (Any 1 out of 2) 2
1. Discuss: budding in Yeast
 2. Explain: antheridium in Aspergillus
- C. Answer in Detail : (Any 1 out of 2) 3
1. Write industrial applications of Yeast.
 2. Give note on Cleistothecium.
- D. Write a Note on : (Any 1 out of 2) 5
1. Describe with diagram: Haplobiontic type life cycle in Yeast.
 2. Describe: Asexual reproduction in Aspergillus.
- 3** A. Objective type questions : (All are compulsory) 4
1. How many thalli may be produced from germination of a gemma ?
 2. Which organs in the sporogonium of Funaria controls the spore liberation ?
 3. What is Paraphyses ?
 4. What is an elaters?
- B. Answer in Brief : (Any 1 out of 2) 2
1. Give note on: Bryophytes uses in Horticulture.
 2. Classify Anthoceros.
- C. Answer in Detail : (Any 1 out of 2) 3
1. Explain: Innovations as vegetative reproduction in bryophyte.
 2. Explain: Internal structure of thallus of Anthoceros.
- D. Write a Note on : (Any 1 out of 2) 5
1. Describe the internal structure of the lid of capsule of Funaria including dehiscence of capsule.
 2. Describe the internal structure of sporophyte of Anthoceros.

- 4 A. Objective type questions : (All are compulsory) 4
1. What is the Protostele ? write the types of it only.
 2. What is ramenta ?
 3. Give common name of Adiantum.
 4. Differentiated between actinostele and atactostele.
- B. Answer in Brief : (Any 1 out of 2) 2
1. Write types of Siphonostele given by Jeffrey.
 2. Draw the labelled diagram of mature sporangium of Adiantum.
- C. Answer in Detail : (Any 1 out of 2) 3
1. Write the economic importance of Pteridophytes.
 2. Draw the labelled diagram of T.S. of Adiantum rachis
- D. Write a Note on : (Any 1 out of 2) 5
1. What is stele ? Describe modifications of siphonostele.
 2. Describe sexual reproduction in Adiantum.
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- 5 A. Objective type questions : (All are compulsory) 4
1. Pinus is phanerogames with lack of _____.
 2. The ectotrophic mycorrhizae is belongs to which sub-division?
 3. Which type of pollination in Pinus ?
 4. Give floral formula of lantana indica.
- B. Answer in Brief : (Any 1 out of 2) 2
1. Write any four species of Pinus.
 2. Give floral diagram and floral formula of Combretaceae family.
- C. Answer in Detail : (Any 1 out of 2) 3
1. Draw -labelled diagram of Pinus female Cone.
 2. Classify Commelinaceae family.
- D. Write a Note on : (Any 1 out of 2) 5
1. Classify Euphorbiaceae with floral diagram and floral formula.
 2. Draw labelled, diagram of Pinus needle.