

05/12/25 (11)

(i) Printed Pages : 4

Roll No.

(ii) Questions : 9

Sub. Code :

1	1	7	2	0
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Exam. Code :

5	0	1	1
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**Bachelor of Science (FYUP) 1st Semester
(2125)**

BOTANY

Paper : Plant Diversity-I BOTDSC1

Time Allowed : Three Hours]

[Maximum Marks : 67

Note :— Attempt **five** questions in all. Question No. 1 is compulsory.
Select **one** question from each unit.

(Compulsory Question)

1. A. **MCQ :**

(i) Chlorophyll a and b are present in :

- (a) Chlorophyceae (b) Xanthophyceae
(c) Phaeophyceae (d) Rhodophyceae

(ii) *Rhizopus* belongs to class :

- (a) Oomycetes (b) Ascomycetes
(c) Basidiomycetes (d) Zygomycetes

(iii) Floridean starch is the reserve food in :

- (a) Chlorophyceae (b) Xanthophyceae
(c) Phaeophyceae (d) Rhodophyceae

- (iv) Organisms growing on dead and decaying matter are called :
- (a) parasites (b) saprophytes
(c) epiphytes (d) detritivores
- (v) Gaidukov phenomenon is found in :
- (a) *Oscillatoria* (b) *Volvox*
(c) *Ectocarpus* (d) *Batrachospermum*
- (vi) Algal partner in lichens is called :
- (a) Mycobiont (b) Phycobiont
(c) Rhizobiont (d) Epibiont
- (vii) The arrangement of two types of sex organs in separate clusters on 2 branches of the same plant is called :
- (a) basipetal (b) phialopore
(c) acropetal (d) autoicous
- (viii) The central solid part of capsule in *Anthoceros* is known as :
- (a) Foot (b) Columella
(c) Glomerule (d) Spermatangium

8×1=8

B. Fill in the blanks :

- (i) Ribosomes of fungi are of type.
- (ii) *Anthoceros* belongs to class
- (iii) Presence of vesicles is the unique feature of Phaeophyceae.

- (iv) In *Albugo*, sporangia are arranged in succession.
- (v) Sexual reproduction in *Rhizopus* takes place by
- (vi) Yeasts belong to class
- (vii) In *Riccia*, the wall of the ventre forms at maturity. 7×1=7

UNIT—I

2. Write notes on :

- (a) General characters of algae
- (b) Asexual reproduction in *Ectocarpus* 7,6

3. Write notes on :

- (a) Reproduction in *Oscillatoria*
- (b) Post-fertilization changes in *Batrachospermum* 5,8

UNIT—II

4. Give the disease cycle of white rust of crucifers in detail. 13

5. Write notes on :

- (a) Morphology of *Rhizopus* thallus
- (b) Sexual reproduction in yeast 6,7

UNIT—III

6. Write notes on :

- (a) Disease symptoms of Red Rot of sugarcane
- (b) Give a general account of lichens and their various types. 6,7

7. Give a diagrammatic life history of *Ustilago tritici*. 13

UNIT—IV

8. Draw only :
- (a) V.S. thallus of *Anthoceros*
 - (b) V.S. male shoot of *Funaria* showing antheridia. 6,7
9. Describe the morphology and sexual reproduction in *Riccia*. 13