

(i) Printed Pages : 3

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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B.A./B.Sc. (General) 1st Semester

(1129)

BOTANY

Paper : A Plant Diversity-I

Time Allowed : Three Hours]

[Maximum Marks : 36

Note :— Attempt **five** questions in all. Question No. 1 is compulsory.

Attempt **four** more question, selecting **one** question from each Unit. Draw neat and well-labelled diagrams wherever necessary.

(Compulsory Question)

1. (A) Fill in the blanks :

- (i) _____ is **not** an Ascolichen.
- (ii) Uredial and Telial stages of *Puccinia* are found on _____ plant.
- (iii) _____ is of great use in space flights and nuclear submarines as food and also in recycling oxygen regenerating system.
- (iv) Fungal component of lichen is called _____.
- (v) The normal orientation of the cells of the *Volvox* Coenobium is obtained by _____ of the cells of the sphere.
- (vi) Thallus of *Vaucheria* is _____. 6×1=6

(B) Multiple choice questions :

- (i) _____ algae contains maximum iodine.
(a) *Dictyota* (b) *Laminaria*
(c) *Sargassum* (d) *Ecotocarpus*
- (ii) Gongrosira stage of *Vaucheria* is made up of _____.
(a) Zoospores (b) Synzoospores
(c) Akinetes (d) Aplanospores
- (iii) Which of the following is a saprophytic fungus ?
(a) *Ustilago* (b) *Puccinia*
(c) *Colletotrichum* (d) *Agaricus*
- (iv) *Rhizopus* is commonly known as _____.
(a) Rust (b) Smut
(c) Bread mould (d) Mushroom
- (v) Asexual reproduction in *Batrachospermum* takes place by _____.
(a) Zoospores (b) Synzoospores
(c) Teleutospores (d) Monospores
- (vi) *Volvox* colony is known as _____.
(a) Coenobium (b) Isidia
(c) Cystocarp (d) Fairy's ring $6 \times 1 = 6$

UNIT—I

2. (a) Describe sexual reproduction in *Vaucheria*.
(b) Write note on *Volvox* coenobium. $4+2=6$
3. (a) Describe cell structure of *Oscillatoria*.
(b) Discuss Asexual reproduction in *Cladophora*.
(c) Give cell structure in Bacteria studied by you. $2+2+2=6$

UNIT—II

4. Discuss in detail sexual reproduction in *Dictyota*. Draw its diagrammatic life cycle. 6
5. Write notes on :
 - (a) Fruiting body of *Batrachospermum*.
 - (b) Chantransia stage in *Batrachospermum*. 3+3=6

UNIT—III

6. Give diagrammatic life cycle of three different yeast species studied by you. Draw neat diagrams. 6
7.
 - (a) Discuss asexual reproduction in *Albugo candida*.
 - (b) Describe asexual reproduction in *Rhizopus*. 3+3=6

UNIT—IV

8. Discuss in detail life history of *Puccinia graminis tritici* on wheat and barberry plants. Give its graphic representation. 6
9.
 - (a) Write note on fruiting body of *Agaricus*.
 - (b) Draw V.S. *Lichen* thallus. 4+2=6