

CS

SARDAR PATEL UNIVERSITY
B.Sc. SECOND SEMESTER NOT CLEAR EXAMINATION
2016
SATURDAY 15th OCTOBER
02:00 TO 04:00 pm
USO2CBIO 02
(THALLOPHYTA, BRYOPHYTA AND PTERIDOPHYTA)

Marks: 70

- Note: 1. Answers of all the questions (including multiple choice questions) should be written in the provided answer book only**
2. Draw neat and labeled diagrams wherever necessary

Q.1. Select the correct answer and write it in the answer sheet. [10]

1. Study of algae is called _____
 (a) Phycology (b) Mycology (c) Geology (d) Ecology
2. *Volvox* colony with definite number of cells is known as _____
 (a) Pseudopodium (b) Coenobium (c) Conidium (d) Gonidium
3. Star shaped chloroplasts are present in _____
 (a) *Volvox* (b) *Nostoc* (c) *Zygnema* (d) *Ectocarpus*
4. Fungal cell wall is made up of _____
 (a) Chitin (b) Cellulose (c) Lignin (d) Pectin
5. Mushrooms are rich in _____
 (a) Carbohydrates (b) Proteins (c) Pigments (d) Fats
6. _____ is known as horn wort
 (a) *Funaria* (b) *Riccia* (c) *Anthoceros* (d) *Marchantia*
7. The upper narrow part of archegonium is known as _____
 (a) Neck (b) Venter (c) Capsule (d) Stalk
8. Group of sporangia in Fern is known as _____
 (a) Sporangiphore (b) Sorus (c) Sporophyll (d) Strobillus
9. Stele in which xylem is broken into isolated plates is known as _____
 (a) Mixed protosteles (b) Actinosteles (c) Plectosteles (d) Siphonosteles
10. Sporophyll is a fertile leaf that bears _____
 (a) Antheridia (b) Archegonia (c) Conidia (d) Sporangia

(P.T.O.)

Q.2. Answer the following questions in brief (Any 10) [20]

1. Sketch and label *Nostoc* filament
2. Describe the structure of *Volvox* colony
3. What is cystocarp?
4. Comment on budding in Yeast
5. Explain the structure of *Rhizopus* mycellium
6. State the economic importance of *Penecillium*
7. Describe the structure of antheridia
8. Name the three main parts of *Anthoceros* sporophyte and state their functions
9. State the functions of rhizoids and enlist their types in *Riccia*
10. Define actinostele
11. State the xerophytic peculiarities of *Equisetum* stem
12. Sketch and label Fern sporangia

Q.3. (a) Discuss the asexual reproduction in *Volvox* [05]

(b) Explain the scalariform conjugation in *Zygnema* [05]

OR

Q.3. (a) Describe the plurilocular sporangia of *Ectocarpus* [05]

(b) Explain the thallus structure of *Batrachospermum* [05]

Q.4. (a) Discuss the asexual reproduction in *Rhizopus* [05]

(b) Write note on Lichens [05]

OR

Q.4. (a) State the economic importance of Fungi [05]

(b) Describe the mycellium of *Penecillium* [05]

Q.5. (a) Describe the external morphology of *Riccia* thallus [05]

(b) Draw a labelled diagram of L.S. of *Funaria* capsule [05]

OR

Q.5. (a) Explain the sexual reproduction in *Anthoceros* [06]

(b) Describe the sporophyte of *Riccia* [04]

Q.6. With a labelled diagram describe the internal structure of *Equisetum* stem [10]

OR

Q.6. Explain the anatomy of *Lycopodium* stem with labelled diagram [10]

ALL THE BEST

(2)