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SARDAR PATEL UNIVERSITY  
B.Sc Examination (SEM-2)  
Sub-US02CBIO02

No. of Printed Pages: 3

Date-26/4/2011  
Tuesday

Time-3-00pm to 5-00pm  
Total marks-70

Thallophyta, Bryophyta &  
Pteridophyta

Q.1- Multiple Choice Questions

(10)

- 1) Tissue systems are \_\_\_\_\_ in the body of algae.  
(a) Absent (b) Present (c) Both of these (d) None of these
- 2) \_\_\_\_\_ groups of algae do not reproduce sexually.  
(a) Cyanophyceae (b) Chlorophyceae  
(c) Xanthocyaceae (d) Phaeophyceae
- 3) The shape of chloroplast in *Zygnema* is \_\_\_\_\_.  
(a) Reticulate (b) cup-shaped (c) ribbon-shaped (d) star-shaped
- 4) Fungal cell-wall is composed of \_\_\_\_\_.  
(a) Chitin (b) cellulose (c) hemicellulose (d) glycogen
- 5) *Rhizopus* is \_\_\_\_\_.  
(a) Autotrophic (b) parasitic (c) symbiotic (d) saprophytic
- 6) Which is known as Greenmold \_\_\_\_\_.?  
(a) *Mucor* (b) *Rhizopus* (c) Yeast (d) *Penicillium*
- 7) Name a bryophyte which shows Nostoc colonies in the thallus.  
(a) *Riccia* (b) *Anthoceros* (c) *Funaria* (d) *Marchantia*
- 8) In which of the following Paraphyses and Antheridia occur together?  
(a) *Anthoceros* (b) *Funaria* (c) *Riccia* (d) *Marchantia*
- 9) In *Lycopodium* sporangium originates on :  
(a) Spore (b) microphyll (c) sporophyll (d) ligule
- 10) Peltate disc is a characteristic feature of strobilus of which pteridophyte?  
(a) *Equisetum* (b) *Selaginella* (c) *Lycopodium* (d) *Rhynia*

Q.2 Short Answer Questions (ANY TEN)

(20)

- 1) Name the male and female sex-organs of Batrachospermum?
- 2) What is the function of the gonimoblast filament?
- 3) Describe the cell-structure of Nostoc.
- 4) Write about unilocular sporangium of Ectocarpus.
- 5) Describe the vegetative structure of Rhizopus.
- 6) Name the spores produced in lichens after sexual reproduction.
- 7) Give differences between algae and fungi.
- 8) Describe the cell structure of Anthoceros.
- 9) In which bryophyte pyrenoids are present in chloroplast?
- 10) Describe the structure of sporangium of Nephrolepis.
- 11) Write xerophytic characters of Equisetum.
- 12) Rearrange the following parts of Lycopodium stem in proper order: Cortex, Pericycle, Endodermis, Stele, Epidermis.
- 13) Write a short note on spore dispersal mechanism in Funaria. .

Q-3- Describe the followings.

- a) The thallus structure of Ectocarpus. (03)
- b) The cell structure of Batrachospermum. (03)
- c) Scalariform conjugation in Zygnema. (04)

OR

Q-3-Answer the followings

- a) Write a note on-Algae as food. (04)
- b) Draw a labelled diagram of a cell of volvox. (03)
- c) Describe the thallus structure of Zygnema. (03)

Q-4-Answer the followings:

- a) Describe – Asexual reproduction in Rhizopus. (05)
- b) Write a note on : Fungi used as medicine. (05)

OR

Q-4-Answer the followings:

- a) Draw a labelled diagram of Yeast cell. (03)
- b) Write about nutritional value of mushrooms. (03)
- c) Describe asexual reproduction in Penicillium. (04)

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- Q-5-(a) Draw a labelled diagram of L.S. of Funaria capsule. (05)  
(b) Describe the internal structure of thallus of Riccia. (05)

OR

- Q-5-(a) Describe the structure of sex-organs of Riccia. (06)  
(b) Draw a labelled diagram of Anthoceros thallus. (04)

Q-6 Answer the followings:

- a) Explain the structure of sporangium of Nephrolepis. (03)  
b) Draw a diagram of L.S. of Lycopodium strobilus. (03)  
c) Describe external structure of Equisetum. (04)

OR

Q-6-Answer the followings.

- a) Draw a diagram of prothallus of Nephrolepis. (05)  
b) Describe external characters of Lycopodium. (05)

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