

BIOLOGY (Subjective) GROUP - I

Time: 02:40 Hours

Marks: 68

SECTION – I**2. Write short answers to any EIGHT parts.**

16

- (i) Define protective role of water.
- (ii) What are inhibitors? Give one example.
- (iii) Differentiate between pepsin and pepsinogen.
- (iv) What are reversible inhibitors?
- (v) Write resemblances of fungi with plants.
- (vi) What are rust and smut diseases of plants?
- (vii) Define protandrous animals.
- (viii) Differentiate between parazoa and eumetazoa.
- (ix) What is the commercial importance of sponges?
- (x) Name three classes of phylum Annelida.
- (xi) What is the role of antenna complex in photosynthesis?
- (xii) Give the function of spectrophotometer.

3. Write short answers to any EIGHT parts.

16

- (i) What is hydroponic culture technique? Give its possible applications.
- (ii) Define hypothesis.
- (iii) Give salient features of cell theory.
- (iv) Write four important functions of endoplasmic reticulum.
- (v) What are kelps?
- (vi) Give the importance of physarum polycephalum.
- (vii) What are choanoflagellates? How are they related to sponges?
- (viii) Give four general characters of algae.
- (ix) What is meant by arthropods?
- (x) What are paraphyses and protonema?
- (xi) Define plasmolysis and deplasmolysis.
- (xii) Define immunity.

4. Write short answers to any SIX parts.

12

- (i) What are prions?
- (ii) What is mesosome?
- (iii) What is assimilation?
- (iv) Define nutrition.
- (v) What is botulism?
- (vi) Define photorespiration.
- (vii) What is operculum?
- (viii) What are parabronchi?
- (ix) What is asthma?

SECTION – II

Attempt any THREE questions. Each question carries 08 marks.

5. (a) Give a detailed account of cloning.

04

(b) Discuss cardiac cycle in detail.

04

6. (a) What are carbohydrates? Give details of monosaccharides with suitable structural illustrations.

04

(b) Describe economic gains due to fungi.

04

7. (a) Give use and misuse of antibiotics.

04

(b) Discuss the life cycle of an angiospermic plant.

04

8. (a) Give detail of life cycle of bacteriophage with diagram.

04

(b) Explain non-cyclic phosphorylation along with diagram.

04

9. (a) Give structure and function of mitochondria.

04

(b) Write notes on (i) Anorexia nervosa (ii) Bulimia nervosa

04