

SECTION – I

2. Write short answers to any EIGHT (8) questions :

16

- (i) Define conjugated molecules.
- (ii) How enzyme concentration affects the rate of enzyme action?
- (iii) Define lock and key model of enzyme.
- (iv) What is enzyme to enzyme chain?
- (v) Differentiate between fragmentation and budding in fungi.
- (vi) What is mycorrhizae? Give its types.
- (vii) Differentiate between proterostomia and deuterostomia.
- (viii) Define polymorphism. Also give example.
- (ix) What do you know about class hirudinea?
- (x) Write down some general characteristics of class chondrichthyes.
- (xi) Define chemiosmosis.
- (xii) Write down the molecular formulae of chlorophyll “ a ” and “ b ”.

3. Write short answers to any EIGHT (8) questions :

16

- (i) Differentiate between biocontrol and bioremediation.
- (ii) What is cloning? Write one method of cloning.
- (iii) How intermediate filaments support cell?
- (iv) Give role of vacuole in plant cell.
- (v) Why slime molds are included in kingdom protocista?
- (vi) Differentiate between zooflagellates and dinoflagellates.
- (vii) Why euglena is difficult to classify?
- (viii) Write features of chrysophyta.
- (ix) Differentiate between monocots and dicots.
- (x) Which plant group is called arthropytes and why?
- (xi) What are lenticels? Write their use.
- (xii) Give blood route in fish circulatory system.

4. Write short answers to any SIX (6) questions :

12

- (i) What is capsid and capsomeres?
- (ii) What is contribution of Louis Pasteur in microbiology?
- (iii) What are hunger pangs?
- (iv) What are hemorrhoids?
- (v) Define assimilation.
- (vi) What are spiracles?
- (vii) Why photorespiration occurs in plants?
- (viii) What are parabronchi?
- (ix) What is respiratory distress syndrome?

SECTION – II

Note : Attempt any THREE questions.

5. (a) Write in detail, drug treatment and gene therapy. 4
 (b) Discuss functions of lymphatic system. 4
6. (a) Describe primary and secondary structure of protein. 4
 (b) Discuss asexual reproduction in fungi. 4
7. (a) Discuss nutrition of bacteria. 4
 (b) Describe economic importance of poaceae. 4
8. (a) Discuss life cycle of bacteriophage. 4
 (b) Sketch two phases of glycolysis. 4
9. (a) Describe structure and functions of mitochondria. 4
 (b) Discuss process of absorption in large intestine. 4