

SECTION-I

2. Write short answers of any eight parts from the following:

(8x2=16)

- i. What are terpenoids, give example?
- ii. In what way enzyme concentration affects the rate of enzyme action?
- iii. What are inhibitors? Give example.
- iv. Define co-factor, give example.
- v. Differentiate Ascomycetes with Basidiomycetes and give example.
- vi. Compare spores with conidia.
- vii. Define polymorphism, give example.
- viii. Compare parazoa with metazoa.
- ix. Differentiate acoelomate with coelomate.
- x. Justify earth worm as natural plough.
- xi. What are accessory pigments? Give their role.
- xii. Differentiate between chlorophyll "a" and "b".

3. Write short answers of any eight parts from the following:

(8x2=16)

- i. Differentiate between deductive and inductive reasoning.
- ii. Define biome. How it is named?
- iii. Why mitochondria are called power house of cell?
- iv. How ribosomes of prokaryotes differ from eukaryotes?
- v. What are diatoms?
- vi. Give importance of dinoflagellates.
- vii. What are Kelps?
- viii. Discuss role of both nuclei in ciliates.
- ix. Write down names of living and extinct members of psilopsida.
- x. Define circinate vernation. in which class of pteropsida it is important character?
- xi. What is incipient plasmolysis?
- xii. What do you know about hypertension?

4. Write short answers of any six parts from the following:

(6x2=12)

- i. What are symptoms of AIDS?
- ii. How chemosynthetic bacteria are autotrophic in nature?
- iii. What is filter feeding nutrition? Give example.
- iv. Which plant nutrients cause chlorosis?
- v. Differentiate between cutaneous respiration and pulmonary respiration.
- vi. Give names of hormones secreted by human digestive system.
- vii. What are Alveoli? Give their function.
- viii. What changes occur in diving mammals during diving reflex?
- ix. What is photorespiration? Give its consequences.

SECTION-II

Note Attempt any three questions. Each question carries equal marks:

(8x3=24)

5. (a) Relate cloning with sexual reproduction?
(b) Explain circulatory system of cockroach?
6. (a) Describe at least four comparisons between DNA and RNA.
(b) Write down methods of nutrition in fungi.
7. (a) Write down characteristics of cyanobacteria.
(b) Describe evolution of leaves.
8. (a) Give the biological classification of corn, Zea mays.
(b) Describe the Calvin cycle with reference to carbon fixation and reduction.
9. (a) Write a note on structure and function of Golgi apparatus.
(b) Explain the mechanism of absorption of food in small intestine.