

Note: Section I is compulsory. Attempt any TWO (2) questions from Section II.

SECTION - I

Q.2 Write short answers to any FIVE (5) questions: 10

- i What do you know about molecular biology?
- ii Write down the scientific name of mustard plant and also write down its two uses.
- iii Define biosphere level.
- iv Write down contributions of French Army physician Laveran.
- v What were the four major observations of malaria in the last part of 19th century?
- vi What is meant by incubation period?
- vii Define turgor pressure.
- viii What is meant by cytoskeleton?

Q.3 Write short answers to any FIVE (5) questions: 10

- i How do forests keep balance in biosphere?
- ii Write down the role of Carolus Linnaeus in Biology.
- iii Define cell cycle.
- iv What is difference between growth and development?
- v Write down causes of tumor formation.
- vi Compare chromosomes and chromatin.
- vii Which compound enters into Kreb's cycle?
- viii Define glycolysis and write down name of its product.

Q.4 Write short answers to any FIVE (5) questions: 10

- i How enzymes work together in metabolic pathways?
- ii Write down effect of pH on enzyme activity.
- iii Why induced fit model is more acceptable than lock and key model?
- iv Write down role of nitrogen in plants.
- v What is mastication?
- vi Why transpiration is necessary for plants?
- vii Write down the names of different chambers of human heart.
- viii Describe two preventive measures to avoid Dengue Fever.

SECTION-II

Note: Attempt any TWO (2) questions.

- Q.5(a)** Explain organ and organ system level in the level of organization. 5
- (b)** Explain the structure of cell wall. 4
- Q.6(a)** Define deforestation. Explain causes and effects of deforestation. 5
- (b)** Explain with diagram oxidation-reduction reactions. 4
- Q.7(a)** Write down a comprehensive note on dietary fibre. 5
- (b)** Explain white blood cells and platelets. 4