

Section A: Life Processes in Living Organisms Part-2 (15 Marks)

Q1. Multiple Choice Questions (5 Marks)

1. The functional unit of the kidney is:
(a) Neuron (b) Nephron (c) Hepatocyte (d) Osteocyte
2. The hormone responsible for regulating blood sugar levels is:
(a) Insulin (b) Adrenaline (c) Thyroxine (d) Growth hormone
3. The plant hormone responsible for cell elongation is:
(a) Auxin (b) Cytokinin (c) Gibberellin (d) Absciscic acid
4. The process of maintaining a constant internal environment is called:
(a) Homeostasis (b) Metabolism (c) Excretion (d) Reproduction
5. The part of the brain responsible for controlling involuntary actions is:
(a) Cerebrum (b) Cerebellum (c) Medulla oblongata (d) Hypothalamus

Q2. Short Answer Questions (5 Marks)

1. Explain the role of the endocrine system in human beings.
2. Describe the mechanism of reflex action.
3. What are plant hormones? Give examples and their functions.

Q3. Long Answer Question (5 Marks)

Explain the structure and function of the human excretory system.

Section B: Environmental Management (15 Marks)

Q1. Multiple Choice Questions (5 Marks)

1. The major cause of air pollution is:
(a) Deforestation (b) Industrialization (c) Overpopulation (d) Urbanization
2. The layer of the atmosphere that protects us from harmful UV radiation is:
(a) Troposphere (b) Stratosphere (c) Mesosphere (d) Thermosphere
3. The process of conversion of fertile land into desert is called:
(a) Deforestation (b) Desertification (c) Soil erosion (d) Water pollution
4. The major source of water pollution is:
(a) Industrial effluents (b) Domestic sewage (c) Agricultural runoff (d) All of the above
5. The sustainable use of natural resources is important for:
(a) Environmental conservation (b) Economic development (c) Social well-being (d) All of the above

Q2. Short Answer Questions (5 Marks)

1. What is biodiversity? Explain its importance.
2. Describe the causes and effects of global warming.
3. What are the different methods of solid waste management?

Q3. Long Answer Question (5 Marks)

Explain the concept of the ecosystem and its components. Discuss the importance of ecological balance.