

Section-A**Multiple Choice Questions (MCQ's)****Q.1** Choose the correct answer for each from the given options.

- (i) The gas responsible for depletion of ozone is _____.
 (a) Oxygen (b) Carbon Dioxide
 (c) Nitrogen (d) Chlorine
- (ii) LAMARCKS THEORY is based on following points except _____.
 (a) Effects of environment (b) Use and disuse of organs
 (c) Natural selection (d) Inheritance of acquired characters.
- (iii) The region where the impulse moves from one NEURON to another is called _____.
 (a) Neural gap (b) Synapse (c) Synapsis (d) Inter-neuron
- (iv) The regulation of temperature upto a tolerable limit is called _____.
 (a) Osmo regulation (b) Osmo excretion
 (c) Temo regulation (d) None of them
- (v) Which type of reproduction is common in sponges and Coelenterates?
 (a) parthenogeneses (b) Fission (c) Budding (d) None of them
- (vi) Kidney develops from _____.
 (a) Ectoderm (b) Nissal body (c) Dendrite (d) Axon
- (vii) The long myelinated coated process of Neuron is known as _____.
 (a) Cell body (b) Nissal body
 (c) Dendrite (d) Axon
- (viii) The process of formation of cDNA strand from mRNA is termed as _____.
 (a) Transcription (b) Replication
 (c) Reverse Transcription (d) Translation

Section-B (Short Answers)**Note:** Answer any TEN of the following question Q.No.2 is Compulsory.

- Q.2: Differentiate between any one of the following:
 (a) Striated voluntary muscle and striated involuntary muscle
 (b) Spermatogenesis and Oogenesis
- Q.3: What is the role of vector in Genetic Engineering?
- Q.4: Name any four main nitrogenous excretory products.
- Q.5: Define the term Area opaca and area pellucida.
- Q.6: Explain the working of sensory receptor with reference to arteries.
- Q.7: Write down the name of diseases which are related with Unifactorial defect and Multifactorial defect.
- Q.8: Define any two of the following:
 (i) Sarcomere (ii) Cretinism (iii) Gerontology
 (iv) Blastoderm
- Q.9: How sexual reproduction plays its role in avoiding Genetic monotony.
- Q.10: Enlist the objections of "Lamarckism Theory"
- Q.11: Explain the mechanism of "Jet Propulsion" effect in the Jelly Fish
- Q.12: Draw neat and labelled diagram of cortical and Juxta medullary nephrons.
- Q.13: How nicotine affects on the human body?
- Q.14: What is "Animal pole"?

Section-C (Descriptive Answer)**Note:** Answer any ONE of the following questions. Each question carries 13(7+6) marks.

- Q.15(a) What are the secretions and role of pituitary gland?
 (b) How does Excretion occur in Earth worm. explain?
- Q.16(a) Discuss the types of skeletal system.
 (b) Define gene frequency. Explain the Hardy-Weinberg law.