Q.1: Select and write the most appropriate answer from the given alternatives in each sub-question. (1 Mark each)

(i) Study of modes of transmission of diseases is called .......... 
   (a) Parasitology  
   (b) Epidemiology  
   (c) Nosology  
   (d) Immunology

(ii) Sarcoma is the cancer of .......... 
   (a) blood  
   (b) endodermal tissues  
   (c) epithelial tissues  
   (d) mesodermal tissues

(iii) In haemometer, RBC's are haemolysed by .......... 
   (a) HCl only  
   (b) H₂SO₄ only  
   (c) HNO₃ only  
   (d) KMnO₄ only

(iv) WWW. stands for .......... 
   (a) World Wide Work  
   (b) World Wide Websurfing  
   (c) World Wide Web  
   (d) World Wise Web

(v) Which one of the following earthworms is particularly adapted for commercial production of vermicompost? 
   (a) Field worms  
   (b) Manure worms  
   (c) Night crawlers  
   (d) Round worms

(vi) Which one of the following is not an Indian major carp. 
   (a) Cattle  
   (b) Cyprinus  
   (c) Labeo  
   (d) Mrigala

(vii) Haemoglobin is absent in the blood of .......... 
   (a) Cockroach  
   (b) Earthworm  
   (c) Frog  
   (d) Rabbit

(viii) A muscular wall is absent in .......... 
   (a) arteriole  
   (b) capillary  
   (c) vein  
   (d) veinules

Q. 2 (A) Write the full form of ELISA. Name any two diseases, other than AIDS, which can be diagnosed by this test. (2)

OR

(B) Explain vermicompost as bio-fertilizer. (2)

OR

What is Database? Describe its types in brief.

(C) Explain the different modes of fish preservation. (2)

(D) Explain the impact of population explosion on food supply. (2)

Q. 3 (A) Draw a neat and well labelled diagram of ventral view of heart. (2)

(B) Describe the ill effects of drug addiction. (2)

OR

Describe indirect transmission of diseases in brief.

(C) Describe the structure of antibody. (2)

(D) Give the role of hormones released by neurohypophysis. (2)

OR

With suitable diagram describe the structure of unfertilized ovum.

Q. 4: Attempt any TWO of the following: 

(A) With suitable diagram describe the structure of nephron. (4)

(B) Explain the disorders caused due to hypothyroidism and hyperthyroidism. (4)

(C) Define Cleavage. Describe the process of cleavage upto the formation of morula. (4)

Q. 5: What is reflex action? Describe the different components of reflex arc. Add a note on mechanism of reflex action. (8)

OR

(A) What is Blood Pressure? Describe different types of blood pressure and add a note on factors affecting it. (4)

(B) What is Excretion? Describe the various modes of excretion in animals. (4)