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

(i) Population explosion in India is mainly due to .......... (1)
   (a) Decreased mortality  (b) Climatic conditions
   (c) Increased food production  (d) Increased natality

(ii) The confirmatory test used to diagnose AIDS is .......... (1)
   (a) ELISA test  (b) Western blot test
   (c) PCR  (d) Widal test

(iii) Visceral disorders can be detected with .......... (1)
   (a) E.C.G.  (b) Haemometer
   (c) Sonography  (d) Sphygmomanometer

(iv) Collection of the essential data in Bio-informatics is known as .......... (1)
   (a) Files  (b) Data base
   (c) Directory  (d) Error

(v) In India which of the following genera of earthworm is extensively used for Vermiculture? (1)
   (a) Eudrigaster  (b) Eudrilus
   (c) Ponsussolex  (d) Phereitima

(vi) Which of the following is not obtained in sea water? (1)
   (a) Catla  (b) Shark
   (c) Mackerel  (d) Sardine

(vii) Glucose is taken back from glomerular filtrate through .......... (1)
   (a) Active transport  (b) Diffusion
   (c) Passive transport  (d) Sardine

(viii) The excretory product of fresh water fishes is .......... (1)
   (a) Urea  (b) Uric acid
   (c) Ammonia  (d) Guanine

Q. 2: Answer the following questions:

(A) Describe in brief the uses of Sphygmomanometer. OR Define the term Bio-informatics. Give any 'two' applications of Bio-informatics.

(B) Give the significance of Vermicompost. OR Define Fishery. Mention in brief its types.

(C) Explain the terms Natality and Mortality with reference to human population.

(D) What are the symptoms of Cancer?

Q. 3: Answer the following questions:

(A) Sketch and label V.S. of Human kidney.

(B) Explain common problems of adolescence. OR Explain any 'two' direct modes of transmission of diseases.

(C) Write a short note on Hypersensitivity.

(D) Give the role of any 'two' Gonadotrophins. OR Give the functions of Uterus.

Q. 4: Attempt Any Two of the following:

(A) Sketch, label and describe central nervous system of Cockroach.

(B) Describe the histological structure of Thyroid gland.

(C) With the help of suitable diagram describe the T.S. of testis.

Q. 5: Answer the following questions:

With the help of neat labelled diagram describe the internal structure of Human heart. OR

(A) Describe the structure of Malpighian body.

(B) Define Receptors. Describe different types of Receptors.