

# BIOLOGY QUESTION PAPER

Time : 2 Hrs.

Max. Marks : 40

**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 haemocytometer, RBC's are haemolysed by .....  
(a) HCl only (b)  $H_2SO_4$  only  
(c)  $HNO_3$  only (d)  $KMnO_4$  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) venules

**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

What is Database ? Describe its types in brief.

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

OR

Explain the different modes of fish preservation.

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

**(D)** What are the symptoms of AIDS ? (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)