

# 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 :** [8]
- (i) The causative agent of AIDS is ..... [1]  
(a) Housefly (b) Mosquito  
(c) Taenia (d) HIV
- (ii) Which blood group has no antibodies in the plasma? [1]  
(a) A (b) B  
(c) AB (d) O
- (iii) In Sonography, ultrasound waves are produced using crystals of..... [1]  
(a) Lead acetate (b) Lead chloride  
(c) Lead zirconate (d) Lead phosphate
- (iv) Which is the protein sequence database? [1]  
(a) Gen Bank (b) DDBJ  
(c) EMBL (d) SWISS-PROT
- (v) The deoxygenated blood from body is received in ..... [1]  
(a) Left auricle (b) Right auricle  
(c) Right ventricle (d) Left ventricle
- (vi) Renal medulla contains ..... [1]  
(a) Columns of Bertini (b) Columns of Malpighi  
(c) Columnae corneae (d) Chordae tendineae
- (vii) In favourable condition, paramecium reproduces by, ..... [1]  
(a) Budding (b) Multiple fission  
(c) Binary fission (d) Fragmentation
- (viii) The vas deferens starts from the ..... [1]  
(a) Corpus epididymis (b) Cauda epididymis  
(c) Caput epididymis (d) Testis

**Q. 2. (A) Mention the methods of Fish preservation.** (2) [8]

OR

Describe the production of Vermicompost on small scale.

**(B) Give the uses of Electrocardiograph (ECG).** (2)

OR

Give the applications of Bioinformatics.

**(C) Sketch and label T. S. of Artery.** (2)

**(D) Explain the terms - Cretinism and Myxoedema.** (2)

**Q. 3 (A) Give the Food Value of Fishes.** (2) [8]

**(B) Give the significance of Fertilization.** (2)

OR

Give the functions of Uterus.

**(C) What are the symptoms of AIDS?** (2)

**(D) Give the role of any two hormones secreted by Adenohypophysis.** (2)

OR

Write a note on Para-follicular cells.

**Q. 4 : Attempt any TWO from the following :** [8]

**(A) Give the causative agent, symptoms and preventive measures of Typhoid.** (4)

**(B) Describe the Central Nervous System of Cockroach.** (4)

**(C) Describe the impact of population explosion on Health and Housing.** (4)

**Q. 5: Define Reflex action. Describe the components of reflex arc and give significance of reflex action.** (8) [8]

OR

**(A) Explain the mechanism of working of Human Heart.** (4)

**(B) Describe the structure of Malpighian Corpuscle and add a note on Ultra-filtration.** (4)