

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) 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) Haemocytometer
(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) Pontoscolex (d) Pheretima
- (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) Osmosis
- (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 :

[8]

- (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 :

[8]

- (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 :

[8]

- (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 :

[8]

- 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.