

BIOLOGY QUESTION PAPER

TIME DURATION:2 Hrs

MAXIMUM MARKS: 40

- Note :** (1) All questions are compulsory.
(2) All questions carry equal marks.
(3) Draw neat and labelled diagrams wherever necessary.
(4) Figures to the right indicate full marks.
(5) Answer to every new question must be written on a new page.

Q. 1. Select and write the most appropriate answer from the given alternatives in each sub-question : [8]

- (i) All major calculations and comparisons are made inside the _____ (1)
- (a) Keyboard
 - (b) Monitor
 - (c) Scanner
 - (d) C.P.U.
- (ii) Angiography is used to detect _____ (1)
- (a) haemoglobin content of blood
 - (b) blockages in blood vessel
 - (c) abnormal functioning of heart
 - (d) ulcers and tumors

- (iii) Important species of earthworm used in India is _____. (1)
- (a) Eudrillus eugineae
 - (b) Lumbricus rubellus
 - (c) Eisenia foetida
 - (d) Perionyx excavatus
- (iv) _____ is NOT a marine fish. (1)
- (a) Mrigal
 - (b) Bombay duck
 - (c) Hilsa
 - (d) Pomphret
- (v) Cardiac muscles of heart receive blood supply through _____. (1)
- (a) coronary artery
 - (b) coronary sinus
 - (c) aortic arch
 - (d) pulmonary arch
- (vi) Glomerular capillary network is formed due to divisions of _____ (1)
- (a) inferior vena cava
 - (b) aorta
 - (c) renal artery
 - (d) renal vein
- (vii) Ventral nerve cord of cockroach consists of _____ fused masses of ganglia. (1)
- (a) 4
 - (b) 6
 - (c) 8
 - (d) 9

- (viii) A tree like white matter in grey cortex of cerebellum is called _____ (1)
- (a) ependyma
 - (b) arbor vitae
 - (c) iter
 - (d) aqueduct of sylvius

Q. 2. (A) Give reason: "A person with blood group 'O' is known as universal donor". [8] (2)

OR

Distinguish between — communicable and non-communicable diseases.

(B) Sketch and label — conducting system of human heart. (2)

OR

Enlist the names of motor cranial nerves.

(C) Enlist different uses of sonography. (2)

(D) Describe different methods of preservation of fish. (2)

Q. 3. (A) Give the impact of population explosion on food supply. (2) [8]

(B) Write a note on carcinogenic agents. (2)

OR

Sketch and label human sperm.

(C) Write a note on hormones of neurohypophysis. (2)

(D) Give importance of vermiculture.

-(2)

OR

What is database? Describe secondary database.

Q. 4. Attempt any TWO of the following :

[8]

(A) With the help of neat, labelled diagram, describe pituitary gland.

(4)

(B) Give morphological account of human female reproductive system.

(4)

(C) Describe various modes of transmission and symptoms of AIDS.

(4)

Q. 5. With the help of a neat, labelled diagram, describe structure of nephron and explain its role in o₂ regulation.

[8]

(8)

OR

(A) With the help of a neat labelled diagram, describe T.S. of spinal cord.

(4)

(B) Distinguish between artery and vein.

(4)