

**PART - B**

**ZOOLOGY**

**(Maximum : 30 Scores)**

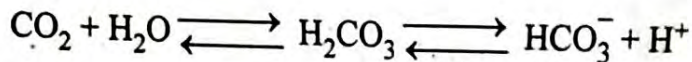
**Time : 1 Hour**

**Cool-off time : 10 Minutes**

**I. Answer any 3 questions from 1 to 5. Each carries 1 score.**

**(3 × 1 = 3)**

1. Select the enzyme that facilitate the following reaction :



- (a) Succinic dehydrogenase                      (b) RuBiSCO  
(c) Carbonic anhydrase                            (d) Lipase

2. Which among the following is a primary metabolite ?

Alkaloids, Antibiotics, Amino acids, Flavonoids

3. Name the portion of the myofibril between two successive Z-lines.

- (a) H-zone    (b) Sarcomere  
(c) I-band    (d) M-line

4. Identify the word pair applicable to phylum ctenophora.

- (a) Nephridia, Parapodia                      (b) Comb plates, Bio luminiscence  
(c) Polyp, Metagenesis                        (d) Radula, Visceral hump

5. Unit of classification is \_\_\_\_\_.

- (a) Taxon    (b) Species  
(c) Genus     (d) Cell

**II. Answer any 9 questions from 6 to 16. Each carries 2 scores.**

**(9 × 2 = 18)**

6. Cells of human body perform different types of movement.

Write any two types of movement and the parts that exhibit the movement.

7. Find out the suitable term from the box for the disorders stated.

- (a) Accumulation of Urea in blood.
- (b) Insoluble mass of crystallised salts in the kidney.
- (c) Surgical method for the correction of Renal failures.
- (d) Inflammation of glomeruli of kidney.

Dialysis, Kidney transplantation, Glomerulonephritis, Uremia, Renal Calculi

8. Characteristics of certain animals are given.

Arrange them under the 'Class' to which these animals belong.

- (i) Skin is moist without scales.
- (ii) Body is covered by dry and cornified skin.
- (iii) Shed the scales as skin cast.
- (iv) Can live in aquatic as well as terrestrial habitats.

9. When substrate concentration increases, the velocity of enzymatic reaction increases at first. After attaining a maximum velocity, it cannot be exceeded by further addition of substrates. Why ?

10. "The products of digestion like glucose and amino acids are absorbed to the blood by active transport, where as electrolytes like chloride ions are generally absorbed by simple diffusion."

How will you differentiate active transport from simple diffusion ?

11. Distinguish between the following terms :

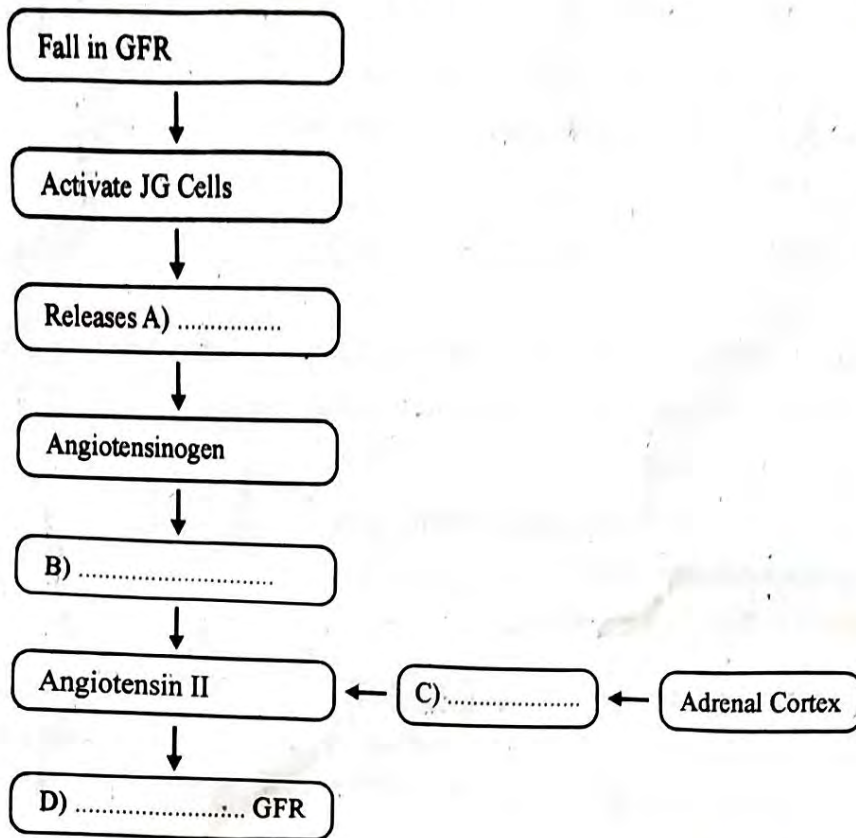
- (a) IRV, ERV
- (b) Tidal volume, Residual volume

12. Enzymes present in Saliva, gastric juice and intestinal juice are given in the box.

- (a) Identify the enzyme present in gastric juice and intestinal juice one each.
- (b) Write their digestive function :

Pepsin, Lysozyme, Trypsinogen, Rennin, Lipases, Salivary amylase

13. Complete the flow chart showing the regulation of kidney functioning by Juxta Glomerular Apparatus and Adrenal Cortex.



14. 'Adrenal medulla is the centrally located tissue in the adrenal gland, where as adrenal cortex is located outside.'

How do adrenal cortex and medulla differ in their function ?

15. 'Cockroach is said to be Uricotelic.'

(a) What do you understand about the nature of excretion of Cockroach from this statement ?

(b) Name two excretory organs of Cockroach.

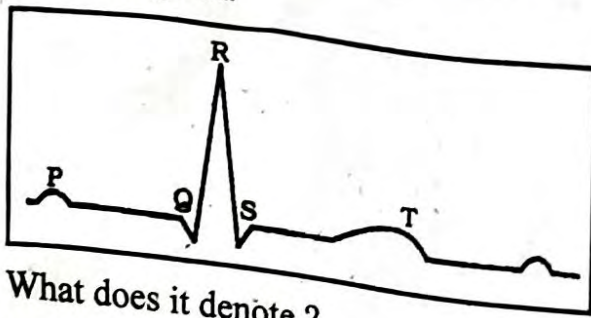
16. Rewrite the given sentences if there is any mistake in the underlined part.

- Cartilage cells are called osteocycles.
- Bones are rich in Calcium salts.
- Intercalated discs are seen in skeletal muscle.
- Skeletal muscles are striated.

III. Answer any 3 questions from 17 to 20. Each carries 3 scores.

(3 × 3 = 9)

17. Observe the diagram.

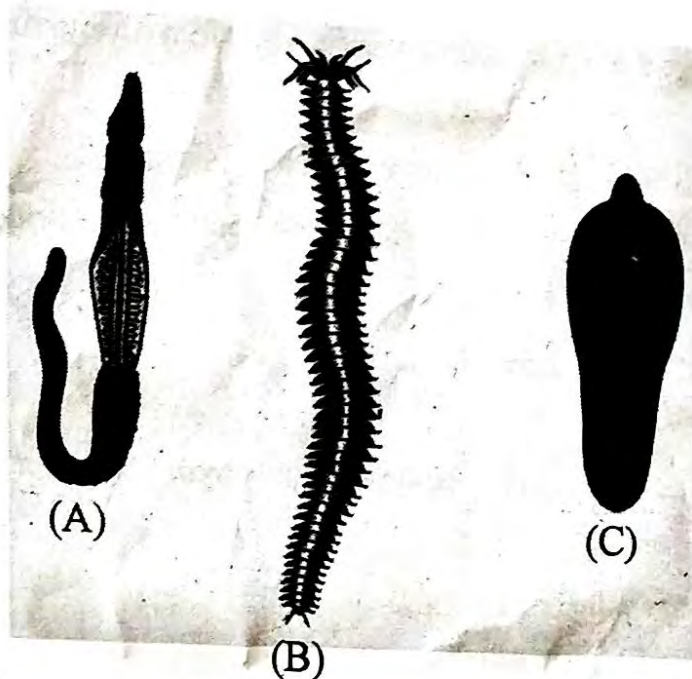


- What does it denote ?
- What do P, QRS, T represent ?
- What is its clinical significance ?

18. Complete the given table appropriately.

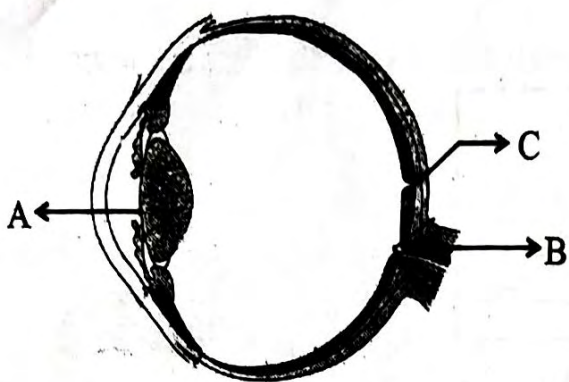
Gland	Hormones	Function
(i) (A) _____	Androgens	Development of male accessory sex organs
(ii) Thymus	(B) _____	(C) _____
(iii) (D) _____	Glucagon	Maintains normal blood glucose levels
(iv) Pineal	(E) _____	(F) _____

19. Observe the figures.



- Identify the organisms A, B & C.
- Name the phylum to which each of them belong.

20. Observe the diagram :



- (a) Name the parts A & B.
- (b) Write the characteristics features of 'C'.
- (c) Arrange the given parts of eye in the sequence that light travels from the external environment into the eye.

(Vitreous chamber, lens, cornea, retina, Aqueous chamber)

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