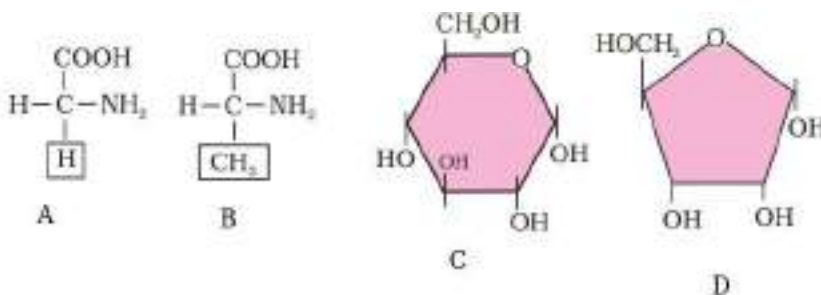


**Version-A****PART – B****ZOOLOGY****HSE-I****(Maximum : 20 Scores)****Time : 1 Hour****I. Answer any 3 questions from 1 to 5. Each carries 1 score.****(3×1=3)**

1. The system of providing scientific name to an organism with two components is called .....
2. Name the most abundant protein in the whole biosphere
3. Name the membrane that protect the eyes of frog while in water
4. Regarding the functions of conducting part of human respiratory system , mark the wrong entry.
  - a. Humidifies the air
  - b. Warms up the air
  - c. Diffusion of gases
  - d. Cleans up the air
5. Note the relationship between the first two words and write a suitable word for the fourth place.  
Chordata – Coelomate ;  
Aschelminthes – .....

**II. Answer any 7 questions from 6 to 14. Each carries 2 scores.****(7×2=14)**

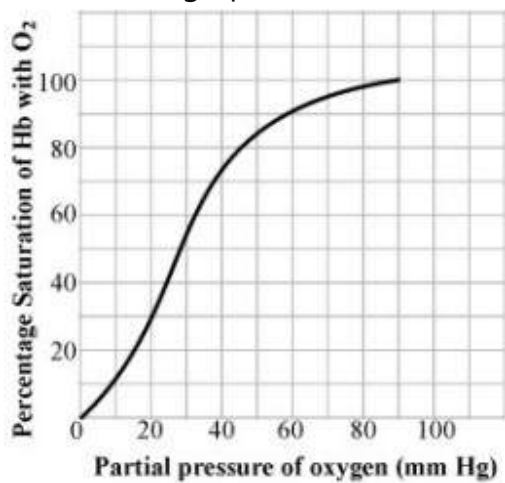
6. Distinguish between
  - a) Tidal volume and Inspiratory reserve volume
  - b) Residual volume and Functional residual capacity
7. Write any two difference between male and female frog
8. Identify the biomolecule A ,B,C and D



9. Characteristics of certain chordates animals are given. Name the 'Class' to which these animals belong.

- (i) Presence of milk producing glands (mammary glands) by which the young ones are nourished.
- (ii) Body is covered by dry and cornified skin.
- (iii) Presence of Feathers
- (iv) Can live in aquatic as well as terrestrial habitats

10. Observe the graph



- a) What does the graph represent?
- b) Write any two conditions in the alveoli that favour the formation of oxyhaemoglobin.

11. Match the following

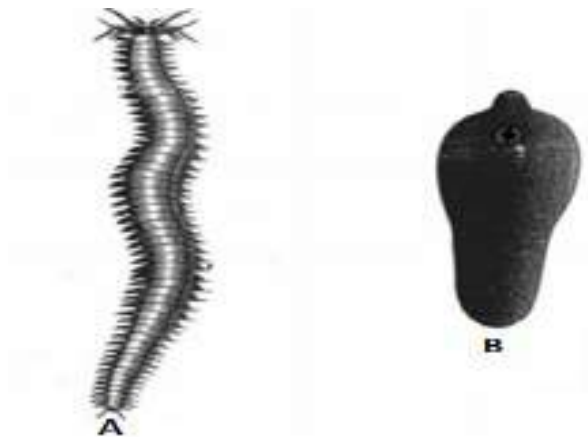
Column A	Column B
a) Phylum Porifera	i) Sea walnut
b) Phylum Coelenterata	ii) Cnideria
c) Phylum Ctenophora	iii) Flat worms
d) Phylum Platyhelminthes	iv) Sponges

12.a) Proteins are linear chains of amino acids linked by.....bond

b) .....level/structure of protein is absolutely necessary for the many biological activities of proteins

c) Name the structure of protein made of more than one polypeptide chain and Write one example

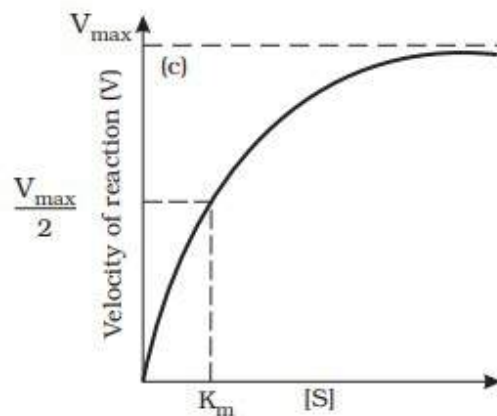
13. Observe the figures.



a) Identify the organisms A, B

b) Name the phylum to which each of them belong

14. 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 ?



III. Answer any 1 questions from 15 to 17. Each carries 3 scores.

(1×3=3)

15. Non-protein constituents called co-factors are bound to the enzyme, to make it catalytically active.

(a) Name the protein part of the enzyme.

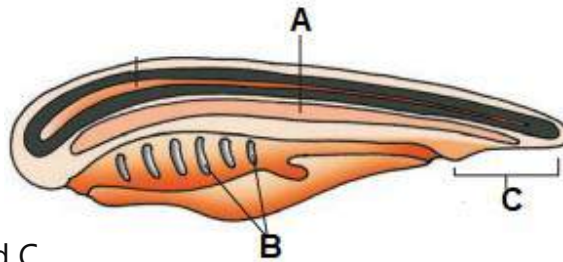
(b) Mention any two kinds of co-factors with examples.

(c) What happens to the catalytic activity of enzyme, when the co-factor is removed ?

16. The digestive system of frog is made of the following parts. Arrange them in an order beginning from mouth.

**Mouth, oesophagus, Buccal cavity, Stomach, Intestine,  
Cloaca, Rectum, Cloacal aperture**

17. Observe the diagram showing the characteristics of phylum Chordata



a) Label A, B, and C

b) Name the three sub phylum coming under chordata

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