

Zoology Teachers Association Malappuram
First year Higher Secondary Revision Series Test 2022

Total Marks : 30

ZOOLOGY

Time : 1 hour

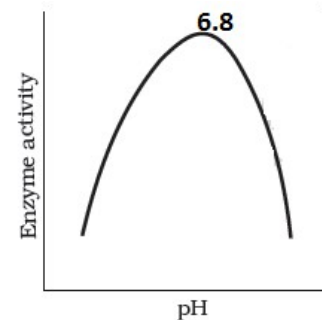
Answer all questions from 1-3. Each carry 1 score (3x1= 3)

1. Name the chemical bond found between the amino acids in a protein molecule?
2. In human beings dentition is heterodont. This condition means
 - a. teeth are placed in sockets of jaw
 - b. presence of two sets of teeth
 - c. presence of different types of teeth
 - d. Presence of two types of teeth
3. The most abundant protein in animal world is

Answer any nine questions from 4-14. Each carries two scores (9x2=18)

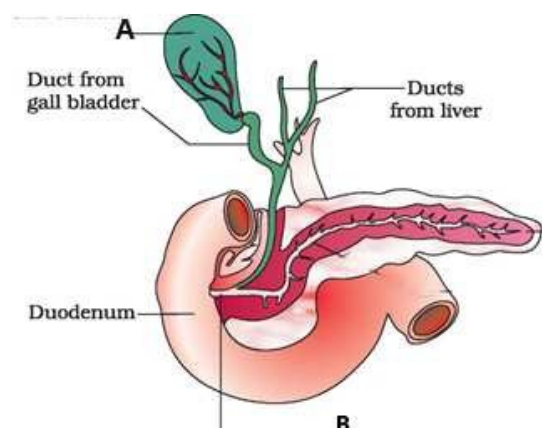
4. Pick out the nucleosides from the following. Name the bond which connect between two nucleotides
(Adenosine, Thymosine, Guanine, Adenylic acid, Cytidine, Uridylic acid)
5. Observe the graph showing the activity of an enzyme influenced by pH

- a. Name the possible enzyme involved in this reaction?
- b. Which is the substrate of this enzyme
- c. Mention any other factor which affects this enzyme activity that results a similar pattern of graph.



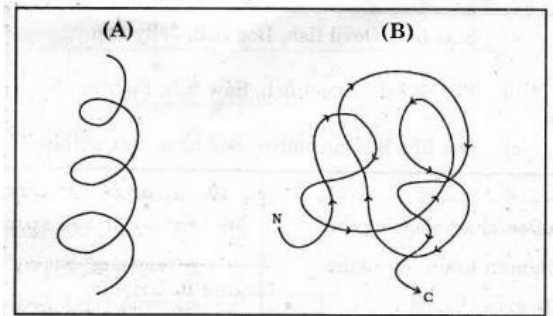
6. Name any two digesting enzymes in succus entericus and mention their role in digestion.
7. Dietary deficiency of proteins is commonly known as PEM.
 - a. Expand PEM
 - b. Name any two examples of PEMs
8. Observe the following diagram and answer the questions.

- a. Identify the parts marked A & B
- b. Name the secretion stored in A and write its role.



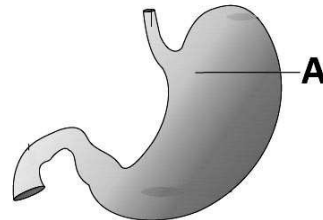
9. Name the components of the following
 a) Uridylic acid b) Thymidine
10. Observe the diagram A and B given below

- a) Identify the type of protein structure of A and B
 b. Identify the proteins from the given list of biomacromolecule and write its functions (Starch, GLUT 4, Inulin, Cellulose)



11. In an enzyme non-protein constituents called cofactors are bound to make the enzyme catalytically active.
 a. Name the protein part of the enzyme
 b. Name any two types of cofactors
 c. What is the cofactor for the enzyme carboxypeptidase
12. Metabolites are organic compounds constantly utilized in various metabolic activities in the cells
 a)What are the two types of metabolites in the cells?
 b)Give an example for each type of metabolites?
13. Observe the diagram and answer the following questions.

- a. Identify the part A of the alimentary canal.
 b. Name the enzyme produced by gastric gland and write the function of the enzyme

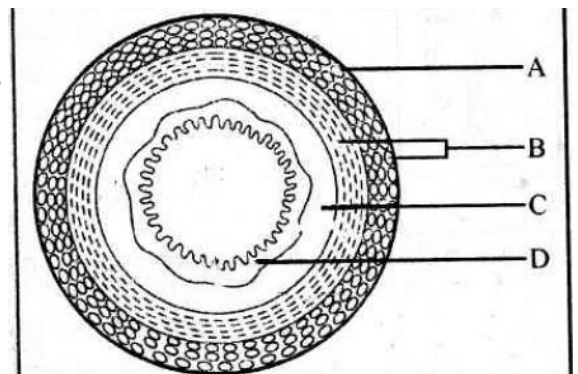


14. Categorise the following digestive enzymes in to two groups with suitable headings
 (Trypsin, Pepsin, Salivary amylase, Maltase, Lactase, Carboxypeptidase)

Answer any three questions from 15-18. Each carries three scores (3x3=9)

15. Observe the diagram of transverse section of human gut :

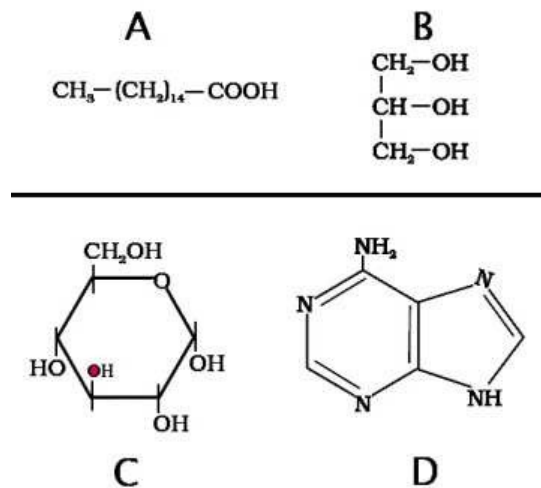
- a. Identify the parts labelled as A,B,C & D
 b) Write any two structural modifications of mucosa at different parts of gut'



16. Match the following

Classification of enzymes	Reactions
Lyases	Catalyse oxido reduction between two substrate
Dehydrogenases	Catalyse hydrolysis of ester, glycosidic bond
Ligases	Catalyse inter conversion of isomers
Transferases	Linking together of molecules
Isomerases	Transfer of a group
Hydrolases	Removal of groups by mechanism other than hydrolysis

17. Observe the following diagrams and answer the questions



a. Identify A, B, C and D

b. Name the compound obtained by the fusion of three A and one B

18. Sketch an outline (or a flow chart) of protein digesting taking place in your alimentary canal ?