

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

ZOOLOGY

Answer Key

Qn No	Scoring key	Score
Answer all questions from 1-3. Each carry 1 score (3x1= 3)		
1	Peptide bond	1
2	c. presence of different types of teeth	1
3	Collagen	1
Answer any nine questions from 4-14. Each carries two scores (9x2=18)		
4	Adenosine, Cytidine Phosphodiester bond / Phosphoester bond	0.5 x2=1 1
5	a. Salivary amylase / Ptyalin / Amylase b. Starch c. Temperature	1 0.5 0.5
6	Maltase – Digestion of Maltose/ Sucrase – Digestion of Sucrose/ Lactase – Digestion of Lactose/ Dipeptidase – Digestion of Dipeptides/ Lipases – Digestion of Lipids/ Nucleotidase – Digestion of Nucleotides/ Nucleosidase – Digestion of Nucleosides/ Disaccharidases – Digestion of Disaccharides (any two)	1x2=2
7	a. Protein- Energy Malnutrition b. Marasmus & Kwashiorkar	1 0.5x2=1
8	a. A – Gall bladder B- Hepato-pancreatic duct b. Bile. Emulsification of fat / Breaking down of fats in to small micelles / Activation of Lipases	0.5x2=1 0.5 0.5
9	a) Uracil, Sugar, Phosphate (each response carries half score) b) Thymus, sugar	1 1
10	a. A Secondary structure B Tertiary structure b. GLUT 4 , Enables glucose transport in to the cell	0.5x2=1 0.5 0.5
11	a. Apoenzyme b. Prosthetic group/ coenzyme/ metal ions (Any two) c. Zinc	0.5 0.5x2=1 0.5
12	a) Primary metabolites & Secondary metabolites	0.5x2=1

	b) Primary metabolites Ex: Amino acids, sugars (any relevant response) (Any one response carries half score) Secondary metabolites Ex: Pigments [Carotenoids]/ Alkaloids/ Essential oils/ Toxins (Abrin,/ Ricin)/ Lectins/ Drugs/ Rubber/ Gums/ Cellulose/ (any relevant response) (any one response carries half score)	0.5×2=1														
13	a. Stomach / Cardiac portion of stomach b. Pepsin – Protein digestion/ Rennin – Protein digestion	1 1														
14	<table border="1"> <tr> <td>Carbohydrate digesting enzymes</td> <td>Protein digesting enzymes</td> </tr> <tr> <td>Salivary amylase, Maltase, Lactase,</td> <td>Trypsin, Pepsin, Carboxypeptidase</td> </tr> </table>	Carbohydrate digesting enzymes	Protein digesting enzymes	Salivary amylase, Maltase, Lactase,	Trypsin, Pepsin, Carboxypeptidase	2										
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Answer any three questions from 15-18. Each carries three scores (3x3=9)																
15	a. A- Serosa B- Muscularis C- Sub mucosa D- Mucosa b) Villus & Rugae	0.5×4=2 0.5×2=1														
16	<table border="1"> <thead> <tr> <th>Classification of enzymes</th> <th>Reactions</th> </tr> </thead> <tbody> <tr> <td>Lyases</td> <td>Removal of groups by mechanism other than hydrolysis</td> </tr> <tr> <td>Dehydrogenases</td> <td>Catalyse oxido reduction between two substrate</td> </tr> <tr> <td>Ligases</td> <td>Linking together of molecules</td> </tr> <tr> <td>Transferases</td> <td>Transfer of a group</td> </tr> <tr> <td>Isomerases</td> <td>Catalyse inter conversion of isomers</td> </tr> <tr> <td>Hydrolases</td> <td>Catalyse hydrolysis of ester, glycosidic bond</td> </tr> </tbody> </table>	Classification of enzymes	Reactions	Lyases	Removal of groups by mechanism other than hydrolysis	Dehydrogenases	Catalyse oxido reduction between two substrate	Ligases	Linking together of molecules	Transferases	Transfer of a group	Isomerases	Catalyse inter conversion of isomers	Hydrolases	Catalyse hydrolysis of ester, glycosidic bond	0.5×6=3
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17	a. A-Fatty acid / Palmitic acid B- Glycerol/Trihydroxy propane C- GLUCOSE D-Adenine b. Triglycerides	0.5×4=2 1														
18	<p>Digestion in stomach</p> <p style="text-align: center;">Proteins $\xrightarrow[\text{PH1.8}]{\text{Pepsin}}$ proteoses, peptones</p> <p>Digestion in small intestine</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;">Proteins, Peptones, Proteoses</td> <td style="width: 33%; text-align: center;"> Trypsin, chymotrypsin, $\xrightarrow{\hspace{2cm}}$ carboxypeptidase </td> <td style="width: 33%;">Dipeptides</td> </tr> </table> <p>Dipeptides $\xrightarrow{\text{Dipeptidase}}$ Aminoacids</p>	Proteins, Peptones, Proteoses	Trypsin, chymotrypsin, $\xrightarrow{\hspace{2cm}}$ carboxypeptidase	Dipeptides	1 1 1											
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