



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 3rd Semester Examination, 2022-23

ZOOACOR07T-ZOOLOGY (CC7)

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
 - (a) Give two examples of storage polysaccharides.
 - (b) What is EC number?
 - (c) What is Hn-RNA and mi-RNA?
 - (d) Draw basic structure of amino acid.
 - (e) What is K_m of enzymatic reaction?
 - (f) What is isoenzyme? Give example.
 - (g) What are the functions of myoglobin?
 - (h) What is competitive inhibition?
 - (i) What is saponification number?
 - (j) How many molecules of ATP is formed in glycolysis?
 - (k) Why fat is solid but oil is liquid in room temperature?
 - (l) What is ionisation of water?

2. Answer any **three** questions from the following: 3×3 = 9
 - (a) Write a short note on Lineweaver-Burk plot.
 - (b) Name two essential amino acids. Why they are called so? 1+2
 - (c) Differentiate between Facilitated diffusion and Active transport.
 - (d) Differentiate between B-DNA and Z-DNA.
 - (e) What is Ketosis? How ketone bodies are produced in our bodies? 1+2

3. Answer any **three** questions from the following: 5×3 = 15
 - (a) Write down the process of glycogenolysis. What is epimer? Give example. 3+1+1
 - (b) Write briefly on different classes of carbohydrates with example.
 - (c) Explain the process of transamination.
 - (d) Give a brief account on the different types of RNA with their functions. 3+2
 - (e) Describe the types of bonds that stabilizes the level of protein structure. What is beta-pleated sheet? 3+2

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