



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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