

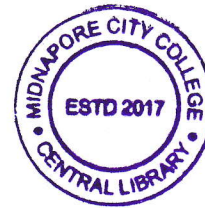
**The West Bengal University of Health Sciences**  
**M.Sc. MLT in Biochemistry 2nd Year December, 2023- January,**  
**2024 Examination**

**Subject: Enzymology and Metabolism**

**Time: 3 hrs**

**Full Marks: 80**

*Attempt all questions*



1. Answer the following questions :

- a) Explain the influence of various factors on activity of an enzyme. 10
- b) Write in detail about the digestion and absorption of lipid and write about causes of fatty stool. 6+4
- c) Describe the reactions of Glycolysis. Add a note on the net ATP yield under aerobic and anaerobic conditions. 4+6
- d) Describe  $\beta$ -oxidation of saturated fatty acids. Write a note on energetic of saturated fatty acids. 10

2. Write in brief on the following :

8 x 5

- a) Explain the terms homo and heteropolysaccharides. Write briefly on hyaluronic acid.
- b) Classify proteins based on their structure with their examples.
- c) Write briefly on secondary structure of DNA.
- d) Define  $K_m$  value and write about its importance.
- e) Write a short note on Allosteric enzyme.
- f) Function of epinephrine & non epinephrine.
- g) Formation of bile acid.
- h) What is fatty liver and explain its causes.