

Roll No. 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

**B.Sc.(Medical Lab Sciences) (Sem.-2)**

**BIOCHEMICAL METABOLISM**

Subject Code : BMLS-202-18

M.Code : 75898

Date of Examination : 30-05-23

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Write briefly :**

- a. Define Andersen's Disease.
- b. Describe the role of carnitine shuttle.
- c. What is Michaelis Menten Equation?
- d. Write the net reaction of Glycolysis.
- e. Enlist at least 4 examples of high energy and low energy compounds each.
- f. Mention the role of Glutamate and Gutamate dehydrogenase.
- g. What is nitrogen balance?
- h. Define Activation Energy (Ea).
- i. Differentiate between competitive and non-competitive enzyme inhibition.
- j. Enlist the Nitrogenous bases found in human DNA with their structures.

### **SECTION-B**

2. Write the process of digestion and absorption of Proteins.
3. Write a detailed note on Glucose Pool.
4. Discuss the role of B6 Phosphate in transamination.
5. Discuss the factors influencing the enzyme activity.
6. Define Transcription. Describe the steps involved in transcription.

### **SECTION-C**

7. What is meant by Glycolysis? Discuss Embden-Meyerhof pathway along with its biochemical importance.
8. Explain Urea Cycle and describe inherited disorders associated with it in detail.
9. Describe in detail the process of biosynthesis of Fatty acid along with its regulations.

**NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.**