Printed Pages: 01 **Sub Code: BP203T**

Paper Id: 238002 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM II) THEORY EXAMINATION 2022-23
BIOCHEMISTRY

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

(a) Classify amino acids with their structures.

(b) What are essential fatty acids? Give examples.

(c) Define the term Glycogen storage disease.

(d) What are uncouplers? Give examples.

(e) Give examples for bile acids and its role in lipid metabolism.

(f) Explain the term Phenylketonuria.

(g) Differentiate codons and anticodons.

(h) Write a note on gout. What are operons?

(i) Classify enzymes with at least one example each.

(j) What is Michaelis-Menten plot?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

(a) Describe the reactions of Citric acid cycle with its bioenergetics.

(b) Explain the steps of protein biosynthesis and a note on protein synthesis inhibitors.

(c) Elaborate the reactions of urea cycle and its disorders. What is transamination?

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

(a) Discuss the various energy rich compounds with their classification and structure.

(b) Explain the HMP shunt pathway with its significance.

(c) Write a short note on Electron Transport Chain and Oxidative Phosphorylation.

(d) Describe the formation and utilization of ketone bodies.

(e) Discuss the β-oxidation of fatty acid with its energetics.

(f) Write short notes on Purine nucleotide biosynthesis.

(g) Describe the competitive enzyme inhibition with suitable examples.