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Roll No.

Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi – 110062
M.Sc. Nutrition and Dietetics
Semester-I

2028
Sem - 1

End Term Examination, 2023-2024

Paper Title: Nutritional Biochemistry-I; Paper Code: MDNCC-105

Time: 03 Hrs.

MaxMarks: 60

Instructions:

- Section A: Attempt any Six
- Section B: Attempt any Six
- Section C: Attempt any Two

SECTION (A) (2 marks each; 2X6=12 marks)

1.	Define reducing and non-reducing sugar	CO1, PO2
2.	What are the irreversible steps glycolysis	CO2,PO3
3.	What are ketone bodies	CO2,PO4
4.	What are the functions of cholesterol	CO3,PO3
5.	Define enzymes and give its classification	CO3,PO2
6.	Define isozyme and ribozyme	CO4,PO5
7.	Define Transamination process	CO4,PO6
8.	Write the names of inborn errors caused by lipid metabolism.	CO5,PO3

SECTION (B) (4 marks each; 4X6=24 marks)

9.	Explain the role of enzymes in diagnostic of diseases	CO1, PO2
10.	Write the general principles of hormone action	CO2,PO3
11.	Explain step by step glycolysis process	CO2,PO4
12.	Explain step by step urea cycle	CO3,PO3
13.	What are the metabolic changes happen during starvation	CO3,PO2
14.	Explain oxidation of fatty acids	CO4,PO5
15.	Explain the regulation of blood sugar in the body	CO4,PO6
16.	How Acetyl CoA promotes Gluconeogenesis	CO5,PO3

SECTION (C) (12 marks each; 12X2=24 marks)

17.	Give a detail explanation of TCA cycle	CO1,PO4
18.	Explain any five inborn errors of proteins and carbohydrates	CO2,PO5
19.	Explain the working principles of spectrophotometry, colorimetry and atomic absorption spectroscopy?	CO4,PO3
20.	Define hormones with its classification and mode of action	CO5,PO6