

2/27

1006E587

Candidate's Seat No : _____

B.Sc. (Hons) (FNS) Sem.-2 Examination

FNS - 122

Nutritional Biochemistry

June 2022

Time : 2-00 Hours]

[Max. Marks : 50

Instructions:

All questions in Section I & II carry equal marks
Illustrate your answers with neat diagrams wherever necessary.

Section- I Answer in detail (Any six)

[42]

1	Explain glycolysis pathway in detail.	07
2	Write a note on Krebs cycle.	07
3	Explain regulation of glycolysis in detail.	07
4	What is the importance of gluconeogenesis? Explain the pathway in short.	07
5	Explain the difference between passive diffusion and facilitated diffusion.	07
6	Write a note on classification of enzymes.	07
7	What is the end product of protein metabolism (amino acid metabolism)? Explain the pathway for the production of it.	07
8	What are the different ketone bodies? Explain synthesis of ketone bodies in brief.	07
9	What are the different types of enzyme inhibition? Explain any two in detail with example.	07
10	Write a brief note on cori cycle and its importance.	07
11	Describe the different complexes of Electron Transport System (ETS).	07
12	Explain transamination reaction of Amino acid and give its importance.	07

Section -II Answer in short (any eight)

[08]

1	Where does TCA cycle take place?	01
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2	Explain the terms: gluconeogenesis, Glycogenolysis	01
3	What is the importance of lactic acid production during anaerobic condition?	01
4	Which of the ETS complex does not pump hydrogen ion?	01
5	If ATP concentration is higher in cell _____ pathway will be inhibited.	01
6	A single molecule of glucose generates _____ molecules of acetyl CoA, which enters the Krebs cycle.	01
7	Who discovered the Urea cycle?	01
8	Which intermediate of the Krebs cycle is utilised in the formation of amino acids?	01
9	Write down the balanced equation for the breakdown of glucose molecule to produce Pyruvate.	01
10	Thiamine (Vitamin B1) act as coenzyme of _____ enzyme of TCA cycle.	01
11	Why should fat be the fuel reserve of the body?	01
12	Enzyme code "EC 1.1.1.1" stands for _____ enzyme.	01
13	The term Enzyme coined by _____.	01
14	Inhibitor resembles the substrate in molecular structure is known as _____.	01

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