SH-III/Nutrition-301/C-5/19

B.Sc. 3rd Semester (Honours) Examination, 2019

NUTRITION

Course ID : 32311 **Course Code : SH/NUT/301/C-5**

Course Title : Nutritional Biochemistry-I

Time: 2 Hours **Full Marks: 40**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions of the following**:** 2×5=10

(a) Define deamination.

(b) What do you mean by glycogenolysis?

(c) What are lipoproteins?

(d) What do you mean by K_m?

(e) What are MUFA and PUFA?

(f) What is glycolysis?

(g) What is Q_{10}?

(h) Define holoenzyome

2. Answer *any four* questions of the following**:** 5×4=20

(a) How can you classify engymes according to the internationally accepted standards? Cite proper examples for each class. 5

(b) What are the end products of transamination? What is the significance of transamination? 2+3=5

(c) Classify lipoproteins. 5

(d) What do you mean by enzyme inhibition? Describe competitive inhibition. 2+3=5

(e) Derive the "Double reciprocal plot" from the Michaelis-Menten Equation. Why is it named so? 4+1=5

(f) Give a schematic diagram of the flow of electrons through the ETC. 5

3. Answer *any one* question of the following: 10×1=10

(a) What are ketone bodies? How are ketone bodies produced in the body? What is ketosis? 2+6+2=10

(b) Why Kreb's cycle is also called as TCA cycle? Describe this cycle mentioning eight steps involved therein. 2+8=10

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