



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - II

Subject : NUTRITION

Paper : C 3 - T

[NUTRITIONAL BIOPHYSICS AND BIOCHEMISTRY]

Full Marks : 40

Time : 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group - A

Answer any **four** questions from the following : 5×4=20

1. What do you mean by the term glycogenolysis? What is ketosis? 2½+2½
2. Write down the conversion from pyruvic acid to succinic acid (mention the name of enzymes and cofactors). 5
3. Why HDL cholesterol is known as good cholesterol? What do you mean by salting in and salting out of protein? 3+2
4. Write down the difference between glycogenesis and glycogenolysis. Write down the difference between acids and bases. What is non-essential amino acid? 2+2+1

P.T.O.

5. Write down the M-M equation. What is competitive inhibitor? 3+2
6. Explain the term K_m . Write down the difference between active and passive transport. 3+2

Group - B

Answer any *two* questions from the following : 10×2=20

7. Write down the types and composition of lipoproteins. Write in short about protein synthesis. 5+5
8. Write down the steps required to oxidize one molecule of oleic acid. Write down the synthesis and utilization of ketone bodies. 5+5
9. Write down the irreversible steps of glycolysis. Describe oxidative phosphorylation. 5+5
10. Write down the steps of carnitine shuttle. 10
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