

Total number of printed pages-4

34 (1) BIOC 1-3

2020

BIOCHEMISTRY

Full Marks : 80

Time : Three hours

***The figures in the margin indicate
full marks for the questions.***

GROUP-A

- I. Essay Type Questions : (*Answer any two*)
10×2=20
 1. Give an account of the metabolism of fat with particular reference to β -oxidation (beta-oxidation) of fatty acid.
 2. Discuss the oxidation of glucose in the tissue upto stage of Pyruvic Acid. What is the other name of Glycolysis ?
 3. Define Enzymes. Classify them with suitable examples.

Contd.

GROUP-B

II. Answer **any eight** questions : 5×8=40

1. Describe Watson and Crick's model of nucleic acid structure.
2. What are essential and non-essential amino acids? Give *two* examples of each type.
3. Write a note on Liver Function Test.
4. Discuss the process of muscle contraction.
5. Enumerate the functions of—
 - (a) Iron
 - (b) Calcium.
6. Write short notes on : (**any two**)
 - (i) Mucopolysaccharide
 - (ii) Lactose Intolerance
 - (iii) Transamination.
7. How is blood pH regulated by lungs?
8. What is HDL? Why is HDL said to be good cholesterol?

9. What do you mean by hormones? What are the different classes of hormones?

10. Write the differences between eukaryotic cell and prokaryotic cell.

GROUP-C

III. Answer **all** the questions : 2×10=20

1. What is reducing sugar?
2. What is PUFA? Give examples.
3. What is Osmolarity?
4. Define BMR. How many calories are required for an adult female to maintain BMR?
5. _____ and _____ are the enzymes present in peroxisomes. (*Fill in the blanks*)
6. The two types of Nucleic acids are _____ and _____. (*Fill in the blanks*)
7. What are the deficiency syndromes of Vitamin A and Vitamin C in our body?

8. Discuss the role of collagens.
 9. What is Balanced Diet ?
 10. What is the role of water in the body ?
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