

Total number of printed pages-3

34 (1) BIOC 1.3

**2021**

**( Held in 2022 )**

**BIOCHEMISTRY**

*Full Marks : 80*

Time : Three hours

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

**Group - A**

- I. Essay type question : (Answer **any two**)  
10×2=20
1. Describe the structure of a typical cell with a neat labelled diagram. Add a note on structure and function of various organelles.
  2. Describe the sources, daily requirement, function and deficiency manifestation of vitamin A.
  3. Describe in detail, the steps of citric acid cycle. What is the biological significance of these cycle ?

*Contd.*

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**Group - B**

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

1. Write the classification of enzymes with examples.
2. Enumerate the sources, RDA of calcium and iron.
3. Write about the biological importance of peptides.
4. Describe the process of muscle contraction.
5. Write a note on liver function test.
6. What is lipoprotein ? Why is LDL said to be bad cholesterol ?
7. Calculate the energy requirement of a 50 kg person doing moderate work.
8. Discuss the different buffer systems present in the body.
9. Write the difference between DNA and RNA.
10. Describe the mechanism of hormone action.

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**Group - C**

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

1. What is atherosclerosis ?
2. Define deamination.
3. What is collagen ?
4. What is the role of water in body ?
5. What is an acid ? Give example of strong acid.
6. Define osmolarity.
7. What is active site of an enzyme ?
8. What is Cori cycle ?
9. Define ketone bodies.
10. What is balanced diet ?

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