

Roll No.

Total Pages : 3

7317/N

J-23/2110

BIOCHEMISTRY-I

Paper-I

Semester-I

Time allowed : 3 Hours] [Maximum Marks : 54

Note : The candidates are required to attempt **two** questions each from Section A and Section B carrying **8** marks each and entire section C consisting of **11** short answer type questions of **2** marks each.

SECTION-A

1. What are biomolecules ? Give weak interactions responsible for stability of these molecules in detail 8
2. Give classification of Carbohydrates with structures. 8

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3. What is Glycolysis? Explain with flow diagram and proper labeling? 8
4. Explain mechanism of oxidative phosphorylation. 8

SECTION-B

5. What are lipids? Give their functions and properties. 8
6. Explain regulation of lipid metabolism. 8
7. What do you mean by metabolism? Give an account of role of enzymes and co-enzymes in metabolic reactions. 8
8. What is environmental pollution ? How this is responsible for causing a lot of healths issues. 8

SECTION-C

9. Write short notes on following : 11×2=22
 - (i) pH Scale
 - (ii) Buffers

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- (iii) Disaccharides
- (iv) Gluconeogenesis
- (v) Biological oxidation
- (vi) Bioenergetics
- (vii) Vitamins
- (viii) Chemical carcinogens
- (ix) Starvation state
- (x) Lipoprotein
- (xi) Air pollutants.