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 (20517) Roll No.
 B.Sc.(Micro.) I Year.

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B.Sc. [Micro.] Examination, May 2017

BIOCHEMISTRY

(B-105)

Time: Three Hours

(Maximum Marks)

Note : Attempt any five questions. All questions carry equal marks.

1. Define carbohydrates & classify them and also discuss important properties of each type with example. 10
2. Discuss the primary secondary, tertiary and quaternary structure of proteins giving suitable example. 10
3. Write short notes on the following :
 $2\frac{1}{2} \times 4 = 10$
 - (i) All types of nucleosides in Nucleic acid

P.T.O.

- (ii) Functions of glutathione
- (iii) Physical & chemical properties of water
- (iv) Buffer solutions with examples.

4. Discuss the different types of bond/linkages found in biomolecules. 10

5. Describe the structure & properties of fatty acids found in Lipids & also discuss the biological importance of lipids. 10

6. Write short notes on the following :
 $2 \times 5 = 10$

- (i) Phospholipids.
- (ii) Optical isomerism in Glucose
- (iii) Peptide bond
- (iv) Potolysis of water
- (v) Nitrogenase

3488/2

7. What are different classes of enzymes and also give the examples of each class. 10

8. (a) Explain oxidative phosphorylation 5

(b) Symbiotic and non symbiotic nitrogen fixation. 5