

N

(Printed Pages 3)

(20517)

Roll No.

B.Sc. Bio-Tech. - I Yr.

NS-3455

B.Sc. Bio-Technology Examination, May 2017

Bio-Chemistry

(B-101)

(New)

Time : Three Hours / [Maximum Marks : 50

Note : Attempt any **five** questions. **Each** question carries 10 marks.

1. Describe the isolation and purification of enzyme in medicine and production of chemical compounds.
2. Name the essential and non-essential amino acids. Why they are called essential and non-essential respectively? Describe the significance of any one essential amino acid.

P.T.O.

3. What is Gene? What is Genetic Code? How protein synthesis takes place in human body?
4. Define enzyme. Discuss the enzyme inhibition in detail. What is feed back inhibition?
5. How Diabetes mellitus and Diabetes insipidus differs from each other? Discuss in detail.
6. Write short notes on : $2.5 \times 4 = 10$
 - (a) Holoenzyme and apoenzyme
 - (b) Coenzyme and cofactor
 - (c) Glycosidic bond
 - (d) Peptide bond
7. Write short notes on : $2.5 \times 4 = 10$
 - (a) Enzyme induction
 - (b) Essential fatty acids
 - (c) Genetic Code and its features
 - (d) Vitamin-D

NS-3455/2

8. Classify lipoproteins. How these are metabolised?
9. Define carbohydrate and differentiate between monosaccharides, oligosaccharides and polysaccharides. What are the structural difference between amylose and amylopectin?
10. Name the growth promoting vitamins. Describe sources, requirements and physiological functions of Vitamin-A.