2019

(October)

BIOCHEMISTRY

(Honours)

(BCHEM–502)

(Nutritional and Clinical Biochemistry)

Marks : 56

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **four** questions, taking at least **one** from each part

PART—A

1. *(a)* Discuss the nutritive and physiological significance of proteins. 3½+3½=7

(b) Describe the method used for the evaluation of protein nutritive value. 7

(Turn Over)

2. Discuss the biological significance and outcome of the deficiency of any *two* of the following : 7×2=14

   (a) Vitamin C

   (b) Calcium

   (c) Iron

3. *(a)* What is SDA? What is the significance of SDA? 2+5=7

   (b) Describe the causes and prevention of protein-calorie malnutrition. 7

PART—B

4. *(a)* Briefly discuss the basic concept of biochemistry in clinical diagnosis. 7

   (b) What are the advantages and disadvantages of automation over manual procedure in clinical diagnosis? 7

5. *(a)* What are the procedures involved in the collection of CSF? What are the tests most routinely performed using CSF? 3½+3½=7

   (b) Write a note on clearance test of urea. What does this test result mean? 5+2=7

(Continued)

6. *(a)* What are isoenzymes? Discuss the significance of isoenzymes in clinical biochemistry. 1+6=7

   (b) Discuss the clinical significance of any *two* of the following enzymes : 3½×2=7

   (i) SGOT

   (ii) Lipases

   (iii) LDH

7. *(a)* What is liver function test? Discuss the importance of this test. 4+3=7

   (b) Write notes on any *two* of the following : 3½×2=7

   (i) Gout

   (ii) Phenylketonuria

   (iii) Hyperglycaemia

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