

5/H-64 (vi) (Syllabus-2015)

2022

(November)

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. $3\frac{1}{2}+3\frac{1}{2}=7$
(b) State the biological significance of Vitamin E and Vitamin B₆. $3\frac{1}{2}+3\frac{1}{2}=7$

(2)

2. Describe the biological role of iron and calcium. Outline the conditions that arise due to their deficiencies in humans. $7+7=14$
3. (a) Briefly discuss the nutritive value of important Indian foods. 7
(b) Define SDA and discuss its significance. $2+5=7$

PART—B

4. (a) Briefly explain the basic concepts of biochemistry in clinical diagnosis. 7
(b) Highlight the advantages and disadvantages of preservation of blood as a biological fluid. 7
5. (a) Discuss the procedures involved in the collection of amniotic fluid. 7
(b) Write a note on the clearance test of urea. What does this test result signify? $5+2=7$
6. (a) What are isoenzymes? Discuss the significance of isoenzymes in clinical biochemistry. $1+6=7$
(b) Explain the clinical significance of any two of the following enzymes : $3\frac{1}{2}\times 2=7$
(i) SGOT
(ii) Alkaline phosphatase
(iii) Cholinesterases

(3)

7. (a) What are liver function tests? Discuss their importance. $4+3=7$
(b) Write notes on any two of the following : $3\frac{1}{2}\times 2=7$
(i) Gout
(ii) Phenylketonuria
(iii) Albinism
