

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY
(BSCMLT)**

**Term-End Examination
December, 2012**

BAHI-005 : CLINICAL BIOCHEMISTRY

Time : 3 Hours

Maximum Marks : 70

PART-A

1. Complete the following : **2x10=20**
- (a) _____ is an example of an essential fatty acid (not synthesized in the body)
 - (b) A sugar which is non reducing (does not reduce Benedict's reagent) is _____.
 - (c) Normal serum sodium level in adult male is _____ mEq/L.
 - (d) Major ketone body produced in blood is _____.
 - (e) Normal range value of serum proteins is _____ gm/dl
 - (f) The rapid rise of level of CPK (MB) enzyme is highly specific for early diagnosis of _____.
 - (g) In Gout, there is increase of _____ level in patient's serum.
 - (h) Normal ratio of serum enzymes SGOT and SGPT is around _____.
 - (i) The main function of ribonucleic acid (RNA) is the synthesis of _____.
 - (j) Muscle fatigue occurs due to the accumulation of _____ acid.

PART- B

Answer *any three* questions. Each carries *ten* marks. **10x3=30**

2. Differentiate between Gluconeogenesis and Glycogenesis. How is blood glucose regulated in the human body ?

3. Define and classify enzymes. How do they differ from coenzymes ? Discuss the factors on which enzyme activity depends.

4. What is Gout ? How is uric acid formed and metabolised in the body ? Briefly describe the procedure of serum uric acid estimation.

5. What are minerals ? Write clinical importance of copper, magnesium and Fluorine in the body.

6. Enumerate important liver function tests. How do you estimate serum bilirubin ? What is its clinical significance ?

PART- C

7. Write short notes on *any four* of the following.
Each carries five marks.

5x4=20

- (a) Nucleosides and Nucleotides
 - (b) Glycosylated haemoglobin (HbA_{1c}) and its clinical significance
 - (c) Source and clinical importance of calcium in human body
 - (d) Lipoproteins and their significance
 - (e) Diagnostic importance of enzymes
 - (f) Iron metabolism
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