

00619

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

Term-End Examination

June, 2013

BAHI-005 : CLINICAL BIOCHEMISTRY

Time : 3 Hours

Maximum Marks : 70

(Compulsory question)

PART-A

1. **Fill in the blanks.** **2x10=20**
- (a) Enzyme of _____ do not acquire co-enzyme for their activity.
 - (b) A substance on which an enzyme acts is called _____.
 - (c) Oxidation of glucose a glycogen to pyruvate and lactate is called _____.
 - (d) When there is absolutely no supply of O₂ to the tissues it is called _____.
 - (e) _____ inhibits glycolysis in vitro.
 - (f) Break down of glycogen to glucose is called- _____.
 - (g) Decrease in blood glucose level below normal is called _____.
 - (h) Glucose tolerance is the ability of the body _____.
 - (i) The types of glucose tolerance test are
(i) _____ (ii) _____
 - (j) _____ is the only organ where ketone bodies are formed.

PART-B

Answer *any three* questions. Each carries
10 marks. 1+1.5+6+1.5

2. (a) Define proteins.
- (b) What are the different methods done in the laboratory for the estimation of Serum T. protien ?
- (c) Write the principle and procedure of the most common method for estimating Total protien in your laboratory.
- (d) Give sample values of Total protein in the following conditions :
- (i) Multiple myeloma.
 - (ii) Nephrotic syndrome.
 - (iii) Normal healthy person
3. (a) List any 4 functions of Kidney. 2+1+5+2
- (b) List any 2 excretory function tests done using blood.
- (c) Describe the method of any one and explain its significance.
- (d) Write sample values in the following conditions.
- (i) Uremia
 - (ii) Starvation

4. (a) What are the enzyme tests that are done to assess the liver function ? **1.5+2+1.5+5**
- (b) What are the factors affecting enzyme activity ?
- (c) Give the normal ranges for the enzyme tests.
- (d) Discuss in detail the procedure for any one of the commonly done enzyme test for liver function.
5. (a) Describe the metabolism of bilirubin in the body. **8+2**
- (b) Write briefly on direct and indirect bilirubin.
6. (a) Define DNA and RNA. **2+2+6**
- (b) What are the differences between DNA & RNA ?
- (c) How uric acid is formed in the body ?

PART-C

7. Write short notes on **any four** of the following. **5x4=20**
- (a) Semi auto analysis in Bio-chemistry.
 - (b) Abnormal electrophoresis.
 - (c) Preparation of Pooled Serum Control.
 - (d) Gonty arthsisitis.
 - (e) Serum calcium.
-