Roll No. ☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.(MLS) (2013 to 2017)   (Sem.–4)
CLINICAL BIOCHEMISTRY-I
Subject Code : BMLS-405
M.Code : 48120

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.**

SECTION-A

1) **Answer briefly :**

   a) Define radioactivity.

   b) What is a titer?

   c) What is standard deviation?

   d) What is renal threshold of glucose?

   e) Why bilirubin is conjugated?

   f) What is a peptide bond?

   g) Discuss tertiary structure of protein.

   h) What is the significance of a control?

   i) What do we mean half life of a radioisotope?

   j) How maintenance of records is important?

SECTION-B

2)   Define Quality Control and quality assurance.

3)   Write down any ten applications of radio isotopes in clinical biochemistry lab. Also write about safety measures while handling of such isotopes.

4)   Discuss various methods for estimating Bilirubin in blood sample.

5)   Give various types of hazards which occur in lab and various safety measures to prevent these hazards.

6)   Discuss the Ethics and Responsibilities of medical lab technologist.

SECTION-C

7)   Name various methods of estimating glucose in blood and urine. Describe any method of estimating glucose in blood and urine in detail.

8)   Define General Principle of ELISA. Give its types and explain sandwich ELISA in detail alongwith its significance?

9)   Write down various methods of estimating sodium and potassium in a serum sample. Explain anyone method of each analyte in detail with its clinical significance.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.