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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc (Medical Lab Sciences) (Sem.-5)

CLINICAL BIOCHEMISTRY-II

Subject Code : BMLS505-18

M.Code : 78372

Date of Examination : 21-06-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS 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 have to attempt any **FOUR** questions.
3. SECTION-C contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION - A

1. Write briefly :

- a) Define automation in clinical biochemistry.
- b) Mention any two indications of an Insulin Tolerance Test (ITT).
- c) What is the principle of the Glucose Tolerance Test (GTT)?
- d) Name the biological fluid used in the xylose excretion test and its clinical relevance.
- e) What is the normal range of serum creatinine and its relevance in clearance tests?
- f) Name two qualitative tests used to detect urobilinogen in urine.
- g) What is Basal Acid Output (BAO) in gastric analysis?
- h) Write the clinical significance of estimating serum T3 and T4.
- i) Mention any two enzymes elevated in hepatic dysfunction.
- j) What is the role of acid phosphates in clinical diagnosis?

SECTION - B

2. Write short notes on qualitative tests for barbiturates and 17-ketosteroids.
3. Explain the working principle and advantages of automation in clinical biochemistry.
4. Differentiate between creatinine clearance and urea clearance test with examples.
5. Explain the principle and diagnostic utility of Alkaline Phosphates (ALP).
6. Write short notes on the chemical examination of Cerebrospinal Fluid (CSF).

SECTION - C

7. Describe in detail the principles, types and benefits of automation in clinical biochemistry with examples.
8. Elaborate on clearance tests for renal function. Describe creatinine clearance and insulin clearance with formulas.
9. Write a detailed note on gastric analysis, including basal and stimulated acid output, its clinical relevance and methodology.

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.