DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
D. M. L. T. : WINTER- 2022
SUBJECT : CLINICAL BIO-CHEMISTRY

Day : Monday | Time : 01:30 PM-04:30 PM

Date : 2/1/2023 | **W-2840-2022** | Max. Marks : 100

N.B.:

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Draw **NEAT** and **LABELLED** diagrams **WHEREVER** necessary.

Q.1 Describe in detail the automation in clinical biochemistry laboratory. **[15]**

Q.2 What is normal blood pH? Describe the defense mechanisms involved in its regulation? Explain in detail the role of kidneys in regulation of pH? **[15]**

Q.3 Describe the principle, working and clinical applications of Colorimetry. Add a note on spectrophotometry. **[15]**

Q.4 Define carbohydrates. Classify them with suitable examples. Explain the reducing property of carbohydrates. **[15]**

Q.5 Write **short notes** on **Any FOUR** (out of **FIVE**) **[20]**

a) Internal Quality Control in clinical biochemistry laboratory

b) Glycolysis

c) Abnormal constituents of urine

d) Iron : functions, disorders and Laboratory investigations

e) Factors affecting enzyme activity

Q.6 Write **short notes** on **Any FOUR** (out of **FIVE**) **[20]**

a) Proteins: Definition, Classification and functions

b) HbAlc (Glycated Hemoglobin)

c) Centrifuge, Analytical balances, pH meter

d) Lipoproteins

e) Enzyme Inhibition

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