## SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

## (A DEEMED TO BE UNIVERSITY)

## M.Sc. Medical Laboratory Technology Semester-I **May 2025 Examination**

Time: 3 Hrs. [Max. Marks: 100]

> 50 Marks Sec-A

Clinical Biochemistry **Q.P Code: M1015** 

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary. **LONG ESSAY**  $1 \times 20 = 20 \text{ Marks}$ 

1. Define Diabetes mellitus. Explain how insulin deficiency results in Diabetes mellitus. Which are the basic laboratory investigations for its diagnosis? What are the common pre-analytical errors during sample collection? (2+8+10)

**SHORT ESSAY** 3X 10 = 30 Marks

- 2. Describe briefly the digestion and absorption of Lipids
- 3. What is Microalbuminuria and glycosylated Haemoglobin? Give their clinical significance
- List the factors affecting enzyme activity. Explain 4 factors with suitable graphs (2+8) 4.

50 Marks Sec-B

Biomedical Techniques & Laboratory Management **Q.P Code: M1016** 

**LONG ESSAY**  $1 \times 20 = 20 \text{ Marks}$ 

1. Define Electrophoresis and give its principle. List the different types. List the applications and limitations of each type of electrophoresis.(5+5+10)

SHORT ESSAY 3X 10 = 30 Marks

- What is centrifugation technique? What are the parts of a centrifuge? Briefly explain density gradient centrifugation and its applications.
- Define Chromatography. Give the principle and applications of Ion exchange and Partition chromatography
- Define Radioactivity. How is it measured? List 5 applications of radioactive isotopes in medicine