



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

M.Sc. Medical Laboratory Technology (Semester-II)

September 2023 Examination

[Max. Marks :100]

Time : 3 Hrs.

Sec-A

50 Marks

Subject: Clinical Biochemistry

Q.P Code : M2045

*Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.*

LONG ESSAY

1 X 20 = 20 Marks

1. Explain the physical examination of Urine. List the various organic and inorganic constituents of normal urine and give the principle of at least one test used to identify these constituents. Give their normal biological range and the clinical application (4 +16)

SHORT ESSAY

3X 10 = 30 Marks

2. Classify the types of jaundice. How is bilirubin estimated by Malloy & Evelyn method (3+7)
3. Explain the types, segregation, disposal and hazards of Biomedical waste.
4. Discuss the type of specimen and the analytical methodology for estimation of Sodium and Potassium. Give the clinical importance

Sec-B

50 Marks

Biomedical Techniques & Laboratory management

Q.P Code : M2046

LONG ESSAY

1 X 20 = 20 Marks

1. Explain the various processes of cell fractionation. Add a note on marker enzymes (15+5)

SHORT ESSAY

3X 10 = 30 Marks

2. With a neat labelled diagram explain the flow of electrons in the ETC. Add a note on high energy compounds (7+3).
3. Explain in detail the Hospital information system (HIS)
4. Give the principle, instrumentation and application of Atomic absorption spectrophotometry

* * *



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

M.Sc. Medical Laboratory Technology (Semester-II)

September 2023 Examination

[Max. Marks :100]

Time : 3 Hrs.

Sec-A

50 Marks

Subject: Clinical Microbiology

Q.P Code : M2055

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

1 X 20 = 20 Marks

1. Classify Herpes viruses . Describe in detail the pathogenesis , clinical features and laboratory diagnosis of Herpes simplex viruses .

SHORT ESSAY

3X 10 = 30 Marks

2. Describe the management of Bio- medical waste .
3. Describe the life cycle and laboratory diagnosis of Ascaris lumbricoides.
4. Describe the Seromarkers of Hepatitis B infection

Sec-B

50 Marks

Subject: Molecular Biology

Q.P Code: M2056

LONG ESSAY

1 X 20 = 20 Marks

- 1 Define mutation and describe various types of mutations with clear diagrams.

SHORT ESSAY

3X 10 = 30 Marks

- 2 Describe the structure of chromosome and explain the steps involved in preparing human karyotype.
- 3 Describe the steps involved in rDNA technology.
- 4 Describe the genetic basis of di-George syndrome and Klienfelter syndrome.

* * *



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

M.Sc. Medical Laboratory Technology (Semester-II)

September 2023 Examination

[Max. Marks :100]

Time : 3 Hrs.

Sec-A
Hematology
Q.P Code : M2065

50 Marks

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

1 X 20 = 20 Marks

1. Describe the laboratory approach in a case of hemorrhagic disorders? Define and describe etiopathogenesis, clinical features and laboratory investigations in Disseminated Intravascular Coagulation

SHORT ESSAY

3X 10 = 30 Marks

- 2 Describe about Biomedical waste management
- 3 Quality Control in Hematology Laboratory
- 4 Describe etiopathogenesis, clinical features and laboratory investigations in a case of Hemophilia

Sec-B

50 Marks

Subject: Clinical pathology and medical genetics

Q.P Code : M2066

LONG ESSAY

1 X 20 = 20 Marks

1. Describe the inborn errors of metabolism highlighting disorders of lipid metabolism. Write a note on gene therapy.

SHORT ESSAY

3X 10 = 30 Marks

2. Describe the etiopathogenesis and clinical features of Down's syndrome
3. Describe the methods of chromosome analysis
4. Describe the indications, contraindications and tests for Pleural fluid analysis

* * *