

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
M.Sc. Medical Laboratory Technology (M.Sc. MLT) (Semester - II)
July 2019 Examinations

Time: 3 Hrs.

[Max. Marks: 100]

Paper – I
Clinical Biochemistry, Biomedical Techniques
& laboratory Management-II

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

Section – A
Clinical Biochemistry **(50 Marks)**
Q.P. Code: M2045
(Use separate answer booklet for section A & B)

LONG ESSAY

1 X 20 = 20 Marks

- 1 Describe the physical and chemical examination of urine sample.

SHORT ESSAY

5 X 6 = 30 Marks

- 2 Explain the xylose absorption test.
- 3 Explain the biomedical importance and regulation of calcium levels in the blood.
- 4 Describe the composition and functions of CSF.
- 5 Explain the procedure and applications of Arterial Blood Gas analysis.
- 6 What are abnormal Hemoglobin? Describe any two in detail.

Section – B
Biomedical Techniques & Laboratory Management **(50 Marks)**
Q.P. Code: M2046
(Use separate answer booklet for Section-B)

LONG ESSAY

1 X 20 = 20 Marks

- 1 Describe the process of cell fractionation. Add a note on marker enzymes.

SHORT ESSAY

5 X 6 = 30 Marks

- 2 Mention the differences between substrate level phosphorylation and oxidative phosphorylation. Give examples of substrate level phosphorylation.
- 3 Mention the different techniques for protein purification. Describe any one in detail.
- 4 Describe the electronic data handling in laboratory
- 5 Describe the role of Hospital Information system in the laboratory.
- 6 Describe the types and segregation of Biomedical waste

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M.Sc. Medical Laboratory Technology (M.Sc. MLT)

First Year (Semester - II)

July 2019 Examinations

Time: 3 Hrs.

[Max. Marks: 100]

Paper – III

Haematology & Blood Transfusion-II

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

Section – A

Haematology

(50 Marks)

Q.P. Code: M2065

(Use separate answer booklet for section A & B)

LONG ESSAY

1 X 20 = 20 Marks

1. Define and describe etiopathogenesis, clinical features and laboratory investigations in Idiopathic Thrombocytopenic Purpura. Write a note on indications, procedure and interpretation of bone marrow study.

SHORT ESSAY

5X 6= 30 Marks

2. Describe internal and external Quality Control in Hematology
3. Describe principle, procedure and interpretations of platelet aggregation studies.
4. Describe normal hemostasis
5. Describe the indications, procedure and interpretation of Coagulation factor assay
6. Describe clinical features and laboratory findings in hemophilia

Section – B

Clinical Pathology & Medical Genetics

(50 Marks)

Q.P. Code: M2066

(Use separate answer booklet for Section-B)

LONG ESSAY

1 X 20 = 20 Marks

1. Describe the laboratory investigations to identify chromosome abnormalities. Write a note on clinical features and laboratory investigation in Klinefelters Syndrome

SHORT ESSAY

5X 6= 30 Marks

2. Describe Barr body and its utility.
3. Describe the CSF findings in pyogenic, viral and tubercular meningitis.
4. Describe the indications, procedure and interpretation of pleural fluid analysis
5. Describe the indications, tests and interpretation of gastric fluid analysis
6. List 03 X linked inherited disease and describe the laboratory findings and clinical features of any one.

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[Max. Marks: 100]

Clinical Microbiology And Molecular Biology - II

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

Section – A

Clinical Microbiology

(50 Marks)

Q.P. Code: M2055

(Use separate answer booklet for section A & B)

LONG ESSAY

1 X 20 = 20 Marks

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

SHORT ESSAY

5 X 6 = 30 Marks

2. Describe the life cycle of Ascaris Lumbricoides .
3. Lab diagnosis of HIV infection .
4. Dermatophytic infections .
5. Hydatid cyst .
6. Biomedical waste management .

Section – B

Molecular Biology

(50 Marks)

Q.P. Code: M2056

(Use separate answer booklet for Section-B)

Long Essay

1X20= 20 marks

1. Explain Lab investigations of genetic disorder. Mention karyotyping types : Principle, procedure and Interpretation of karyotyping

Short Essay

5X6=30 marks

2. Types of RNA and its function
3. Inhibitors of protein biosynthesis
4. Prenatal diagnosis of genetic disease
5. PCR
6. Lesch-Nyhan syndrome

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