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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
M.Sc. Medical Laboratory Technology (MLT) (Semester - I)
February - 2017 Examinations

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

Paper – I
Clinical Biochemistry, Biomedical Techniques & Laboratory Management-I

Your answer should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.
(Use separate answer booklet for section A & B)

Section – A
Clinical Biochemistry (50 Marks)
Q.P. Code:MMLT-105

LONG ESSAY **1 X 20 = 20 Marks**

1. Define proteins. Name the different structural organisation of proteins. Explain with an example. How the primary structure of protein affect the biological properties of the protein.

SHORT ESSAY **5X 6= 30 Marks**

2. What is fatty liver? Enumerate four factors that can cause fatty liver. List lipotropic factors.
3. What are non protein nitrogenous substances? Give examples. Write any four clinical importance of three substances.
4. Define enzymes. Classify enzymes with examples. Add a note on any three factors influencing enzyme activities.
5. Define carbohydrates, classify carbohydrates with examples.
6. What is glucose tolerance test? Explain the procedure. Write its indications and limitations

Section – B (50 Marks)
Biomedical Techniques & Laboratory Management
Q.P. Code –MMLT-106

(Use separate answer booklet for section B)

LONG ESSAY **1 X 20 = 20 Marks**

1. Discuss Principle and applications of Photometry and add a note on Spectrophotometry.

SHORT ESSAY **5X 6= 30 Marks**

2. Explain the importance of HPLC in clinical laboratory.
3. Explain in detail paper electrophoresis and its applications.
4. Briefly describe density gradient centrifugation and its applications.
5. Ion selective electrodes and their applications in Medicine.
6. Measurement of radioactive isotopes and their application in research and clinical bio-chemistry

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
M.Sc. Medical Laboratory Technology (MLT) First Year (Semester - I)
February-2017 Examinations

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

Paper – II
Clinical Microbiology & Immunology-I

Your answer should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.
(Use separate answer booklet for section A & B)

Section – A
Clinical Microbiology
Q.P. Code: MMLT-109

(50 Marks)

LONG ESSAY

1 X 20 = 20 Marks

1. Explain the concept of emerging infectious diseases. Enumerate emerging infections of viral, bacterial and fungal origin. Describe clinical features, diagnosis and management of Ebola virus infection.

SHORT ESSAY

5X 6= 30 Marks

2. Processing of sputum sample for Mycobacterium tuberculosis.
3. Pathogenesis and immunoprophylaxis of tetanus.
4. Gaseous disinfectants.
5. Triple sugar iron agar (TSI) medium.
6. Method of genetic transfer in bacteria.

Section – B
Immunology
Q.P. Code : MMLT-110

(50 Marks)

(Use separate answer booklet for section B)

LONG ESSAY

1 X 20 = 20 Marks

1. Define and classify hypersensitivity reactions. Describe in detail type I hypersensitivity. Add a note on distinguishing features of immediate and delayed hypersensitivity.

SHORT ESSAY

5 X 6= 30 Marks

2. Haemolytic disease of new born.
3. Measles, Mumps and Rubella (MMR) vaccine.
4. Organ specific autoimmunity.
5. Biological activities of endotoxins.
6. Major histocompatibility complex.

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(A DEEMED TO BE UNIVERSITY)

M.Sc. Medical Laboratory Technology (MLT)

First Year (Semester - I) February-2017 Examinations

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

Paper – III

Hematology, Clinical Pathology and Immunopathology-I

Your answer should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.
(Use separate answer booklet for section A & B)

Section – A
Hematology (50 Marks)
Q.P. Code: MMLT-107

LONG ESSAY **1 X 20 = 20 Marks**

1. Classify anaemia etiologically. Discuss the laboratory diagnosis of megaloblastic anaemia.

SHORT ESSAY **5X 6= 30 Marks**

2. Cytochemistry in leukaemias.
3. Agranulocytosis.
4. Platelet count.
5. Semen analysis
6. Glycosuria.

Section – B (50 Marks)
Clinical Pathology & Immunopathology
Q.P. Code –MMLT-108

(Use separate answer booklet for section B)

LONG ESSAY **1 X 20 = 20 Marks**

1. Classify purpura. Describe etiology, clinical features and lab diagnosis of Idiopathic Thrombocytopenic Purpura-ITP.

SHORT ESSAY **5X 6= 30 Marks**

2. Warm antibody.
3. Serum sickness.
4. Auto immune thyroiditis .
5. Direct coomb's test.
6. Widal test.

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