

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Biochemistry)
(Model Question Paper)

PAPER - V Molecular Biology and Immunology

Time: 3 hrs

Maximum marks: 100

- ***Answer all questions***
- ***Draw diagrams wherever necessary***

Essays

(10x10=100)

1. How does glucose, lactose and CRP regulates expression of lac operon.
2. Explain the principle & application of ELISA and immuno electrophoresis.
3. What is the principle of hybridoma technology. Enumerate its uses in medical sciences.
4. Explain the blotting of DNA and the detection of blot.
5. Replication
6. Protein synthesis
7. Recombinant DNA technology
8. Prenatal diagnosis of genetic disorders
9. Chemiluminescence assay
10. Methods of assessing analytical sensitivity, specificity and standardization

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Biochemistry)
(Model Question Paper)

PAPER- VI Diagnostic Biochemistry, Recent Advances in Clinical Chemistry & Biostatistics

Time: 3 hrs

Maximum marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays

(10x10=100)

1. Enumerate the liver function tests and mention the differential diagnosis of jaundice.
2. Explain the various laboratory tests to evaluate pancreatic function.
3. Describe the salient features of random access analyzers.
4. Discuss the role of external and internal quality control in clinical chemistry.
5. Acid base disorders and its diagnostic test
6. Tumor markers - its biochemical and pathological significance
7. Mass spectrometry
8. Biochemistry of AID and its laboratory analysis
9. Reference intervals and clinical decision limits
10. Patho physiology and diagnostic test of diabetes mellitus

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Microbiology)

(Model Question Paper)

PAPER - V Medical Virology

Time: 3 hrs

Maximum marks: 100

- ***Answer all questions***
- ***Draw diagrams wherever necessary***

Essays

(10x10=100)

1. Viral inclusion bodies.
2. Tissue culture and its use in virology.
3. Live viral vaccines.
4. Pathogenesis and laboratory diagnosis of rota virus.
5. H1N1 Influenza.
6. Transport and storage of samples for viral isolation.
7. Serodiagnosis of viral hepatitis.
8. Antiviral agents.
9. Epstein – Barr virus.
10. Immuno fluorescent techniques in viral diagnoses.

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Microbiology)

(Model Question Paper)

PAPER - VI Applied Medical Microbiology & Recent Advances

Time: 3 hrs

Maximum marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays

(10x10=100)

1. Biofilms.
2. E-test and its use.
3. Nosocomial infections.
4. Laboratory investigations to contain MRSA outbreak.
5. DNA probes and its diagnostic applications.
6. Automation in microbiology.
7. Monitoring of operation theatre sterility.
8. Restriction fragment length polymorphism.
9. COSMIDS.
10. Immuno blot assay.

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Pathology)

(Model Question Paper)

PAPER V – Blood Banking & Immuno Pathology

Time: 3 hrs

Maximum marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays

(10x10=100)

1. ABO blood group system.
2. Blood component preparation.
3. Quality assurance in transfusion services
4. Transfusion reactions
5. Screening tests
6. Recombinant DNA technology
7. Molecular genetic techniques for clinical analysis of the immune systems.
8. Type I hyper sensitivity reactions
9. Experimental animal methods to raise antibodies
10. AIDS

QP Code:

Reg. No.:.....

Second Year M.Sc MLT Degree Examination (Pathology)
(Model Question Paper)

PAPER VI. Laboratory Organization, Quality Control, and Recent Advances in Pathology

Time: 3 hrs

Maximum marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays

(10x10=100)

1. Open and closed system analyzers,
2. Purchasing of laboratory equipments and chemicals
3. Quality control systems.
4. Molecular techniques in histopathology.
5. Computerization in histopathology laboratory use of software's.
6. Laboratory safety.
7. Organization of central laboratory in 300 bedded hospital
8. Recent advances in cytogenetic.
9. New generation equipments used in blood bank.
10. Maintenance of laboratory records and statistics.
