

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR**

(Candidates admitted from 2011-2012 & 2013-2014 onwards - Paper IV)

(Candidates admitted from 2020-2021 onwards - Paper V)

PAPER IV & V – GENERAL PATHOLOGY

Q.P. Code : 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Reversible injury. Write a detail note on Necrosis and explain the classification and their morphological changes?
2. Define Neoplasia. Explain the Metastatic Cascade of cancer.

II. Write notes on:

(10 x 6 = 60)

1. Cellular adaptations.
2. Mendelian disorders.
3. Systemic effects of inflammation.
4. Angiogenesis.
5. Overview of Tissue repair.
6. Causes of cell injury.
7. FISH- explain.
8. Causes of Apoptosis.
9. Autophagy.
10. Inflammation.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0522]

MAY 2022

Sub. Code: 1254

M.Sc. MEDICAL LABORATORY TECHNOLOGY

FIRST YEAR

(Candidates admitted from 2011-2012 & 2013-2014 onwards - Paper IV)

(Candidates admitted from 2020-2021 onwards - Paper V)

PAPER IV & V – GENERAL PATHOLOGY

Q.P. Code : 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Tissue repair. Discuss the role of extra cellular matrix in tissue repair.
2. Define Edema. Causes of Edema in detail.

II. Write notes on:

(10 x 6 = 60)

1. Write a short note on Shock.
2. Life cycle of HIV.
3. Mechanism of cell injury.
4. Complement system.
5. PCR and its types.
6. Define carcinogens and their types in detail.
7. Coagulation cascade.
8. Cellular events in inflammation.
9. Oncogenes.
10. Hypertrophy and Metaplasia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1022]

OCTOBER 2022

Sub. Code: 1254

M.Sc. MEDICAL LABORATORY TECHNOLOGY

FIRST YEAR (Regulation 2011-2012)

(Candidates admitted from 2013-2014 onwards – Paper - IV)

(Candidates admitted from 2020-2021 onwards – Paper - V)

PAPER IV & V – GENERAL PATHOLOGY

Q.P. Code : 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Neoplasia. Write the differences between benign and malignant neoplasms and a note on the spread of tumors (Metastasis).
2. Define Shock. Classify shock and write in detail the etiology and pathogenesis of septic shock.

II. Write notes on:

(10 x 6 = 60)

1. Different types of necrosis with examples.
2. Cytokines and their functions.
3. Thrombosis.
4. Fluorescence In Situ Hybridization (FISH).
5. Tumor angiogenesis.
6. Lab diagnosis of Leprosy.
7. Mediators of inflammation.
8. Mendelian disorders.
9. Western blot test.
10. Mechanism of cell injury.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1023]

OCTOBER 2023

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER V – GENERAL PATHOLOGY**

Q.P. Code: 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Neoplasia. Write in detail about the Molecular basis of cancer.
2. Define Tissue repair. Discuss in detail about the process of wound healing.

II. Write notes on:

(10 x 6 = 60)

1. Intracellular Accumulations.
2. Morphologic patterns of acute and chronic inflammation.
3. Autosomal recessive disorders.
4. Necrosis.
5. Types of infarcts with examples.
6. Functions of growth factors.
7. Lab diagnosis of genetic diseases.
8. Tumor suppressor genes.
9. Pathogenesis of HIV.
10. Polymerase Chain Reaction.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0524]

MAY 2024

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER V – GENERAL PATHOLOGY**

Q.P. Code: 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about Cell Injury and Intracellular Accumulation.
2. Define Neoplasia. Discuss about the laboratory diagnosis of cancer.

II. Write notes on:

(10 x 6 = 60)

1. Discuss about the mediators and events of acute inflammation.
2. Infarction.
3. Chronic inflammation.
4. Write a note on Shock and its types.
5. Different types of necrosis.
6. What are labile cells, stable cells and permanent cells?
7. Western Blot.
8. Cytogenetic disorders involving sex chromosomes.
9. Wound Healing.
10. HIV- epidemiology, pathogenesis and lab diagnosis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1024]

OCTOBER 2024

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER V – GENERAL PATHOLOGY**

Q.P. Code: 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain Angiogenesis and also activation of fibroblast and deposition of connective tissues.
2. Explain the etiology, presentation and lab diagnosis of Leprosy.

II. Write notes on:

(10 x 6 = 60)

1. Pathologic calcification.
2. Polymerase chain reaction.
3. Cytokines and their functions.
4. Mendelian disorders.
5. Differentiate between acute and chronic inflammation.
6. Write a note on Thrombosis.
7. FISH (Fluorescent In Situ Hybridization).
8. Autosomal disorders.
9. Cellular Adaptation.
10. Tumour suppressor genes.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0525]

MAY 2025

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER V – GENERAL PATHOLOGY**

Q.P. Code: 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2x20=40)

1. Define necrosis. Classify and describe the etiopathogenesis and morphology of different types with relevant examples.
2. Define Shock. Classify shock and write in detail the etiology and pathogenesis of septic shock.

II. Write Short notes on:

(10x6=60)

1. Write a short note on Pathological calcification.
2. Morphologic patterns of acute and chronic inflammation.
3. Factors affecting wound healing.
4. Define and classify edema with examples.
5. Define virchows triad. Write a note on thrombosis.
6. Fluorescent in situ Hybridisation technique.
7. Write a note on klinefelters syndrome.
8. Write a note on tumour suppressor genes.
9. Differences between benign and malignant tumours.
10. Pathogenesis and lab diagnosis of HIV.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1025]

OCTOBER 2025

Sub. Code: 1254

**M.Sc. MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER V – GENERAL PATHOLOGY**

Q.P. Code: 281254

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2x20=40)

1. Define neoplasia. Describe the molecular pathogenesis in detail.
2. Define amyloid. Describe the classification, etiopathogenesis and special stains used to diagnose amyloid.

II. Write notes on:

(10x6=60)

1. Write a short note on cell adaptation.
2. Write a note on granulomatous inflammation.
3. Define and classify shock with suitable examples.
4. Write a note on cellular events of inflammation.
5. Define and classify infarction with suitable examples.
6. Western blot.
7. Write a note on Down syndrome.
8. Define healing by primary intention. Describe the factors affecting healing.
9. Write a note on chemical carcinogens.
10. Pathogenesis and lab diagnosis of Leprosy.
