M.Sc., MEDICAL LABORATORY TECHNOLOGY EXAMINATION (2013-2014 Batch onwards) FIRST YEAR PAPER IV – GENERAL PATHOLOGY

Q.P. Code: 281254

Time: Three hours Maximum: 100 marks

I. Elaborate on : $(2 \times 20 = 40)$

1. Enumerate the morphological pattern of acute and chronic inflammation and their systemic effects.

2. Definition, etiology, types and Pathogenesis of Shock.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Cell Surface receptors
- 2. Wound Healing
- 3. Complements and their functions
- 4. Coagulation Factors
- 5. Hemostasis
- 6. Types of Embolism
- 7. Types of Necrosis
- 8. Cytokines and their functions
- 9. Chemical carcinogens
- 10. Suppressor genes

M.Sc. (MEDICAL LABORATORY TECHNOLOGY) DEGREE EXAMINATION

(From 2013-2014 Batch onwards)

FIRST YEAR

PAPER IV – GENERAL PATHOLOGY

Q.P. Code: 281254

Time: Three Hours Maximum: 100 marks

Answer ALL questions

I. Elaborate on: $(2 \times 20 = 40)$

1. What are the causes of cell injury and discuss in detail about the NECROSIS.

2. Define Neoplasm. Discuss in detail about the molecular basis of Cancer.

II. Write Notes on: $(10 \times 6 = 60)$

- 1. Complements and their functions.
- 2. Wound Healing.
- 3. Infarction.
- 4. Tumor suppressor genes.
- 5. FISH (Fluorescence in situ hybridization) uses.
- 6. Coagulation factors.
- 7. X-linked disorders.
- 8. Lab diagnosis of Tuberculosis.
- 9. Shock and its types.
- 10. Growth factors.

Q.P. Code: 281254

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Explain the mechanism and causes of Apoptosis with diagrammatic representation.

2. Explain Angiogenesis and also activation of fibroblast and deposition of connective tissues.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Differentiate between acute and chronic inflammation.
- 2. Write a note on growth factors.
- 3. Write a note on tumour cell growth.
- 4. Cytokines and their functions.
- 5. Explain the role of extracellular matrix in tissue repair.
- 6. Pathogenesis and classification of Edema.
- 7. Types of necrosis.
- 8. Gangrene classification.
- 9. Pathogenesis of septic shock.
- 10. Mendelian disorders.

Q.P. Code: 281254

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Explain the different mechanism involved in stoppage of bleeding.

2. Explain the etiology, presentation and lab diagnosis of Leprosy.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Apoptosis.
- 2. Pathologic calcification.
- 3. Pathogenesis and classification of Edema.
- 4. Pathogenesis and effects of Embolism.
- 5. What are labile cells, stable cells and permanent cells?
- 6. Mutations.
- 7. Fluorescence in situ hybridization.
- 8. Oncogenes.
- 9. Telomers and cancer.
- 10. Polymerase chain reaction.

Q.P. Code: 281254

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Explain the morphological patterns of acute and chronic inflammation and the systemic effects of inflammation.

2. Define Neoplasm. Discuss in detail about the characteristics of benign and malignant Cancer.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Write a note on mendelian disorders.
- 2. Explain the process of wound healing.
- 3. Different types of necrosis.
- 4. Lab diagnosis of tuberculosis.
- 5. Write a note on Thrombosis.
- 6. Classification of gangrene.
- 7. Write a note on fluorescence in situ hybridization.
- 8. Cytokines and their functions.
- 9. Write a note on tumor cell growth.
- 10. Pathogenesis of leprosy.

Q.P. Code: 281254

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Explain the pathophysiology of Edema and write about its morphology in different organs.

2. Write about etiology, presentation and morphology of Tuberculosis.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Oxygen derived Free radicals.
- 2. Different types of Infarct.
- 3. Marasmus.
- 4. Turner Syndrome.
- 5. Type I Hypersensitivity reaction.
- 6. Fat Embolism.
- 7. SIDS (Sudden Infant Death Syndrome).
- 8. Oncogenic Viruses.
- 9. Miliary Tuberculosis.
- 10. Role of Cytokines in Inflammation.

Q.P. Code: 281254

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define Shock. Classify shock and write in detail the etiology and pathogenesis of septic shock. Add a note on stages of shock.

2. Define necrosis. Explain the different types of necrosis with examples.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Types of granuloma.
- 2. Role of cytokines in inflammation.
- 3. Sudden Infant Death Syndrome (SIDS).
- 4. Different types of Leprosy.
- 5. List the factors in influencing tissue repair.
- 6. List the Oncogenic viruses and the diseases caused by them.
- 7. Effects of Obesity.
- 8. Lesions in Vitamin A deficiency and hyper Vitaminosis A.
- 9. Down's Syndrome.
- 10. Write a note on spread of tumors (Metastasis).

[LQ 1120]

NOVEMBER 2020 (MAY 2020 EXAM SESSION)

Sub. Code: 1254

M.Sc. MEDICAL LABORATORY TECHNOLOGY FIRST YEAR – (Regulation 2011 – 2012 & 2013-2014) PAPER IV – GENERAL PATHOLOGY Q.P. CODE: 281254

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define Neoplasia. Discuss about pathways of Spread of Cancer.

2. Discuss in detail about Cell Injury and Intracellular Acculumations.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Patterns of Acute Inflammation.
- 2. X-Linked Disorders.
- 3. Mutations.
- 4. Lab diagnosis of Leprosy.
- 5. Infarction.
- 6. Functions of Growth Factors.
- 7. Gangrene.
- 8. Cell Cycle.
- 9. Haemostasis.
- 10. Differences between Benign and Malignant Tumour.

[AHS 0321] MARCH 2021 Sub. Code: 1254

(OCTOBER 2020 EXAM SESSION) M.Sc. MEDICAL LABORATORY TECHNOLOGY

FIRST YEAR (2011-2012 Regulation - From 2013-2014 onwards)
PAPER IV – GENERAL PATHOLOGY

Q.P. Code: 281254

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define inflammation. Discuss about the mediators of acute inflammation.

2. Discuss about Mendelian disorders.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Cardiogenic shock.
- 2. Etiology of cancer.
- 3. Thrombosis.
- 4. FISH (Fluroscent in situ hybridization)
- 5. Difference between exudates and transudate.
- 6. Lab diagnosis of HIV.
- 7. Difference between gangrene and necrosis.
- 8. Hyperplasia.
- 9. Pathogenesis of Tuberculosis.
- 10. Angiogenesis.

[AHS 0921] SEPTEMBER 2021 Sub. Code: 1254 (MAY 2021 EXAM SESSION)

M.Sc. MEDICAL LABORATORY TECHNOLOGY FIRST YEAR (2011-2012 Regulation - From 2013-2014 onwards) PAPER IV – GENERAL PATHOLOGY O.P. Code: 281254

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define Neoplasia. Discuss about the lab diagnosis of cancer.

2. Discuss in detail about wound healing.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Chronic inflammation.
- 2. Autosomal disorders.
- 3. Karyotyping.
- 4. Lab diagnosis of tuberculosis.
- 5. Embolism.
- 6. Functions of cytokines.
- 7. Apoptosis.
- 8. Polymerase chain reaction.
- 9. Western blot test.
- 10. Causes of cell injury.

[AHS 0222] FEBRUARY 2022 Sub. Code: 1254 (OCTOBER 2021 EXAM SESSION)

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: $(2 \times 20 = 40)$

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: $(10 \times 6 = 60)$

- 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.

[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: $(2 \times 20 = 40)$

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: $(10 \times 6 = 60)$

- 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.