#### SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations

#### Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

Q. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### I. Essay Questions:

 $(2 \times 15 = 30)$ 

1. What is Metastasis.

What are the different pathways of spread?

Write in detail about one of the pathways

2. Define anemia.

Discuss etiopathogenesis with blood and bone morrow picture in iron deficiency anemia.

#### **II. Write Short notes on:**

 $(10 \times 5 = 50)$ 

- 1. Free radicals.
- 2. Wilm's tumour.
- 3. Klinefelter syndrome.
- 4. Oncogenic viruses.
- 5. Rhinosporidiosis.
- 6. Ricketts.
- 7. Fine Needle Aspiration Cytology
- 8. Leukemoid reaction.
- 9. Idiopathic thrombocytopenic purpura.
- 10. Erythrocyte sedimentation rate.

#### **III. Short Answer Questions:**

 $(10 \times 2 = 20)$ 

- 1. What are the different types of necrosis?
- 2. Mention 4 factors influencing wound healing.
- 3. Fate of thrombi.
- 4. Enumerate 4 types of chromosomal rearrangements.
- 5. Mention 2 Examples of tumor suppressor genes.
- 6. Mention any 4 childhood malignancies.
- 7. What are red cell indices?
- 8. Blood picture in magaloblastic anemia.
- 9. Mention important investigations necessary for diagnosis of Hemophilia.
- 10. Define Leukemia.

## SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

Q. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

- 1. Define and classify oedema? Discuss Aetio-Pathogenesis and pathology of various types of oedema with examples?.
- 2. 40 years male H/o chronic fatigue, weight loss since 6 months. O/E pallor, marked splenomegaly+, laboratory report shows Hb 10 GM%, TC 215000/CMM. Platelets 4 laks/cmm. Answer the following:
  - a) What is your diagnosis?
  - b) What is common genetic abnormality?
  - c) Blood and Bone Marrow findings to confirm your diagnosis?
  - d) Prognosis of the condition?

#### II. Write Short notes on:

 $(10 \times 5 = 50)$ 

- 1. Chemical mediators of acute inflammation.
- 2. Thrombo-embolism.
- 3. Pathological calcification.
- 4. Trisomy 21.
- 5. Immune complex hypersensitivity (Type III) reactions.
- 6. Laboratory diagnosis of cancer.
- 7. Von-Willebrand's disease.
- 8. Haemolytic disease of newborn.
- 9. Grading and staging of tumors.
- 10. Automatic tissue processor.

#### **III. Short Answer Questions:**

 $(10 \times 2 = 20)$ 

- 1. Difference between exudates and transudate.
- 2. Microscopic picture of acute appendicitis.
- 3. Mast cells.
- 4. Mention four neuclear changes in Necrosis.
- 5. Significance of casts in urine.
- 6. Anti-Coagulants.
- 7. Mention four indications of bone marrow aspiration.
- 8. Reticulocyte count.
- 9. Henoch Schonlein purpura.
- 10. Gross appearance of Mycetoma foot.

#### SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations

#### Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

Q. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

- 1. Define shock, enumerate types of shock and discuss pathogenesis and morphological changes in shock.
- 2. Mention Oncogenic viruses. Describe Oncogenesis by human papilloma virus.

#### II. Write Short notes on:

 $(10 \times 5 = 50)$ 

- 1. Tumor markers.
- 2. Amyloidosis.
- 3. Blood and bone marrow picture in B12 deficiency anaemia.
- 4. Types of embolism. Write on caisson disease.
- 5. Leprosy.
- 6. Evidences of haemolytic anaemia.
- 7. F A B classification of leukemia.
- 8. Mechanism of autoimmune diseases.
- 9. Chemical mediators.
- 10. Silicosis.

#### **III. Short Answer Questions:**

 $(10 \times 2 = 20)$ 

- 1. Fate of thrombus.
- 2. F.N.A.C.
- 3. Modes of spread of tumors.
- 4. Draw Megaloblast, Maxicanhat cell, Pessary cell, Macropolycyte.
- 5. Types of nectrosis with examples.
- 6. Ketone Bodies.
- 7. Tests for sickling.
- 8. Virchow's triad.
- 9. Differences between benign and malignant tumors.
- 10. Bombay blood group.

## SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

O. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

1. Define Oedema. Discuss the pathophysiology of oedema. Add a note on pulmonary oedema.

2. Define and classify Leukemias.

Describe the blood and bone morrow findings in chronic myeloid leukemia.

#### II. Write Short notes on:

 $(10 \times 5 = 50)$ 

- 1. Phagocytosis.
- 2. Haematocrit.
- 3. Sickle cell.
- 4. Tumour suppressor genes.
- 5. Anaphylactic reaction.
- 6. Down's syndrome.
- 7. Metaplasia.
- 8. Kwashiorkar.
- 9. Mycetoma.
- 10. Eosinophilia.

#### **III. Short Answer Questions:**

 $(10 \times 2 = 20)$ 

- 1. Name four causes of fatty liver.
- 2. State four differences between dry and wet gangrenes.
- 3. Define atrophy. Give two examples to physiological atrophy.
- 4. Describe four staining character of amyloid.
- 5. Microscopic appearance of lepromatous leprosy.
- 6. Name two opportunistic infections and two neoplasms seen in AIDS.
- 7. Name two human oncogenic viruses and tumours caused by them
- 8. Blood components prepared in a blood bank.
- 9. What is a Reticulocyte? Mention two causes of reticulocytosis.
- 10. What is cross matching?

## SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

O. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

1. Define inflammation.

Describe the major events of acute inflammation with a note on defective Leukocyte function.

2. Enumerate the various carcinogenic agents.
Classify the chemical carcinogens and describe the steps involved in chemical carcinogenesis.

#### II. Write Short notes on:

 $(10 \times 5 = 50)$ 

- 1. Free Radical Injury.
- 2. Septic Shock.
- 3. Rickets.
- 4. Tertiary Syphilis.
- 5. Proteins in urine.
- 6. Cardiac edema.
- 7. Klinefelter syndrome.
- 8. Type I hypersensitivity reaction.
- 9. Factors affecting wound healing.
- 10. Apoptosis.

#### **III. Short Answers Questions:**

 $(10 \times 2 = 20)$ 

- 1. Sago Spleen.
- 2. Paraneoplastic syndromes.
- 3. ESR.
- 4. Coomb's Test.
- 5. Reed Sternberg Cell
- 6. Hemophilia.
- 7. Metaplasia.
- 8. CVC liver.
- 9. Blood picture in megaloblastic Anemia.
- 10. CSF in tuberculous meningitis.

Revised (Non-Semester) Regulations

#### Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY

O. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

- 1. Define Necrosis. Name the different types of necrosis. Discuss in detail with examples the different types of necrosis. Differentiate between Necrosis and Apoptosis.
- 2. A 70 year old women admitted with worsening anemia and pathological fracture of the Humerus had an ESR of 120mm in 1 hour. Her peripheral smear showed increased rouleaux formation. Xray of skull showed multiple punched out osteolytic lesions.
  - a. What is the most probable diagnosis? Write briefly on the etiopathogenesis of this disease.
  - b. Describe the Bone Marrow Changes in this disease.
  - c. Enumerate the common laboratory investigations for this disease.
  - d. Enlist the complications of this disease.

#### II. Write Short notes on:

 $(10 \times 5 = 50)$ 

- 1. Role of Arachidonic Metabolites in inflammation.
- 2. Pathogenesis of Septic Shock.
- 3. Tumour Metastasis.
- 4. Mitochondrial Inheritance.
- 5. Etiopathogenesis of Cystic Fibrosis.
- 6. Anemia of Chronic Disease.
- 7. FAB classification of Acute Leukemia.
- 8. Idiopathic Thrombocytopenic purpura.
- 9. Transfusion Reaction.
- 10. Hematocrit.

#### **III. Short Answer Questions:**

 $(10 \times 2 = 20)$ 

- 1. Give four examples for pathological calcification.
- 2. Give four examples for Metaplasia.
- 3. Mention two differences between exudates and transudate.
- 4. Mention two renal changes in SLE.
- 5. Give two examples for trace elements and their deficiency states.
- 6. Give four causes for iron deficiency anaemia.
- 7. Mention two important marrow changes in B12 deficiency.
- 8. Two characteristic difference between Myeloblasts and Lymphoblasts.
- 9. Mention two pathognomonic features of Hairy cell leukemia.
- 10. Mention four applications of reticulocyte count.

#### **Revised (Non-Semester) Regulations**

### Paper III – GENERAL PATHOLOGY AND HAEMATOLOGY Q. P. Code: 524063

Time: Three hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

#### **I. Essay Questions:**

 $(2 \times 15 = 30)$ 

1. Define inflammation.

Write in detail about the vascular and cellular changes in inflammation.

- 2. 40 yrs female c/o loss of weight, huge splenomegaly with peripheral blood white blood cell count of more than 1 lakh cells/cc
  - a. What is the probable diagnosis?
  - b. What are the characteristic peripheral smear findings?
  - c. What is the course of the disease?
  - d. What is the chromosomal abnormality involved?

#### **II. Write Short notes on:**

 $(10 \times 5 = 50)$ 

- 1. Classify pigments and write about Lipofuschin.
- 2. Write about outcomes of acute inflammation.
- 3. Growth factors.
- 4. Hybridisation techniques to detect genomic alterations.
- 5. Antibody mediated hypersensitivity.
- 6. Molecular basis of cancer.
- 7. Immunology of Leprosy.
- 8. Primary myelofibrosis.
- 9. Hemophilia A.
- 10. Peripheral smear and Bone marrow findings in Multiple Myeloma.

#### **III. Short Answer questions:**

 $(10 \times 2 = 20)$ 

- 1. Define metaplasia and give two examples.
- 2. Antiphospholipid antibody syndrome.
- 3. Mention four X linked recessive disorders.
- 4. Mention four special stains for Amyloid.
- 5. Lead and blood and marrow changes.
- 6. Four infections associated with AIDS.
- 7. Hamartoma.
- 8. Prions.
- 9. Four Systemic effects of inflammation.
- 10. Hyper IGM syndrome.

#### SECOND M.B.B.S. DEGREE EXAMINATION Revised (Non-Semester) Regulations

### Paper I – GENERAL PATHOLOGY AND HAEMATOLOGY Q. P. Code: 524063

Time: Three Hours Maximum: 40 Marks

Answer **ALL** questions in the same order. Draw Suitable diagrams wherever necessary

#### I. Elaborate on:

1. Define shock. Discuss in detail the pathogenesis of septic shock. Describe the morphology of kidneys and lungs affected by shock.  $(10 \times 1 = 10)$ 

- 2. 60 yrs male presented with normocytic normochromic anaemia, pathological fracture femur and proteinura. X ray skull revealed punched out lesions in the calvarium and peripheral smear studied show rouleaux formation.
  - a) What is your probable diagnosis.
  - b) Discuss in detail the molecular pathogenesis, morphology and clinical features of above said disorder. (5  $\times$  1 = 5)

II. Write notes on :  $(10 \times 1.5 = 15)$ 

- 1. Turner syndrome.
- 2. Immune complex mediated hypersensitivity.
- 3. Differentiation and anaplasia.
- 4. Viral haemorrhagic fevers.
- 5. Morphology of leprosy.
- 6. Morphology of primary myelo fibrosis.
- 7. Pathogenesis of sickle cell disease.
- 8. Chronic immune thrombocytopaenic purpura.
- 9. Free radicals
- 10. Defects in leucocyte function.

#### III. Short Answers on:

 $(10 \times 1 = 10)$ 

- 1. Fat necrosis.
- 2. Heart failure cells.
- 3. Lines of zahn.
- 4. Warburg effect.
- 5. Mott cells.
- 6. 4 tumors associated with AIDS.
- 7. Cross matching.
- 8. Anticoagulants.
- 9. PSEDO PELGER HUET ANOMALY.
- 10. Black water fever.

### Paper I – GENERAL PATHOLOGY AND HAEMATOLOGY Q. P. Code: 524063

Time: 180 Minutes	Maximum: 40 Marks		
Answer <b>ALL</b> questions.	11202		11141115
Draw Suitable diagrams wherever necessary			
I. Elaborate on:	_		Marks
1 Write in detail about careinogenesis physical chemical	(Max.)	(Max.	) (Max.)
1. Write in detail about carcinogenesis physical, chemical and biological and also molecular basis of Carcinogenesis.	16	30	10
2. Chronic myeloid leukemia – clinical features peripheral smear and bone marrow findings and clinical outcome.	8	20	5
II. Write notes on:			
1. Air embolism.	3	8	1.5
2. Kline felters syndrome.	3	8	1.5
3. Arthus reaction.	3	8	1.5
4. Morphology of Primary Tuberculosis.	3	8	1.5
5. Fracture healing.	3	8	1.5
6. Sickle cell disease.	3	8	1.5
7. Poycythemia vera.	3	8	1.5
8. Leukemoid reaction.	3	8	1.5
9. Christmas disease.	3	8	1.5
10. Fanconi's Anemia.	3	8	1.5
III. Short answers on:			
1. Warthin finkeldey giant cells.	2	5	1
2. Factors downregulation apoptosis.	2	5	1
3. Gamma – Gandy bodies.	2	5	1
4. Virchow's traid.	2	5	1
5. Bernard – soulier syndrome.	2	5	1

\*\*\*\*\*

2

2

2

2

2

5

5

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5

5

1

1

1

1

6. Sago spleen.

9. Tear drop cell.

10. MCV.

7. Two special stain for Amyloid.

8. Howell – Jolly bodies.

### Paper I – GENERAL PATHOLOGY AND HAEMATOLOGY Q. P. Code: 524063

Time: Three Hours Maximum: 100 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

I. Elaborate on:  $(2 \times 15 = 30)$ 

1. Define edema.

Discuss the etiopathogenesis of various types of edema with examples.

2. Define and classify anaemia.

Discuss etiopathogenesis, peripheral smear and bone marrow picture in iron deficiency anaemia.

II. Write notes on:  $(10 \times 5 = 50)$ 

- 1. Oncogenic viruses.
- 2. Anaphylactic reaction
- 3. Bence jones proteins.
- 4. Pathologic Calcification
- 5. Vitamin A Deficiency.
- 6. Neonatal respiratory distress syndrome.
- 7. Von Willebrand's Disease.
- 8. Granulomatous inflammation
- 9. Familial hypercholesterolemia.
- 10. Embolism.

#### III. Short Answers on: $(10 \times 2 = 20)$

- 1. Types of necrosis.
- 2. Factors influencing wound healing.
- 3. Fate of thrombus.
- 4. Clinical features of Trisomy 21.
- 5. Oncofetal antigens.
- 6. Reticulocyte.
- 7. Philadelphia chromosome.
- 8. Reed-Sternberg cell.
- 9. Tertiary Syphilis.
- 10. Agranulocytosis.

### Paper I – GENERAL PATHOLOGY AND HAEMATOLOGY Q. P. Code: 524063

Time: Three Hours Maximum: 40 Marks

#### Answer ALL questions.

#### Draw Suitable diagrams wherever necessary

I. Elaborate on:  $(2 \times 7.5 = 15)$ 

- 1. a) 23 yrs female presented with oral ulcers, malar rash photosentivity and non erosive arthritis involving both knees. Laboratory investigations show persistent proteinuria and leucopenia. What is your probable diagnosis.
  - b) Discuss in detail the pathogenesis and morphology of kidney affected by the above disorder.
- 2. Discuss in detail the molecular pathogenesis and morphology of Hodgkin lymphoma.

II. Write notes on:  $(10 \times 1.5 = 15)$ 

- 1. Caseous necrosis.
- 2. Pathology of Fracture healing.
- 3. Morphology of Thrombi.
- 4. Familial hypercholesterolemia.
- 5. Oncogenic Epstein Barr virus.
- 6. Pathogenesis of Amyloidosis.
- 7. Aetiology and morphology of bone marrow in Aplastic anaemia.
- 8. Morphology of multiple myeloma.
- 9. Molecular pathogenesis of Acute myeloid leukaemia.
- 10. Pathogenesis of disseminated intra vascular coagulation.

#### III. Short Answers on: $(10 \times 1 = 10)$

- 1. Define metaplasia & give 2 examples.
- 2. Tigered effect.
- 3. Define Granuloma.
- 4. Systemic factors that influence wound healing.
- 5. Warburg effect.
- 6. Role of Vitamin C in wound healing.
- 7. Prothrombin time.
- 8. Megalobast.
- 9. Rh factor.
- 10. Auer rods.

## SECOND YEAR MBBS DEGREE EXAMINATION Paper V – GENERAL PATHOLOGY AND HAEMATOLOGY

Q. P. Code: 524063

Time: Three Hours Maximum: 40 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

I. Elaborate on:  $(2 \times 7.5 = 15)$ 

- 1. Define thrombosis, write in detail about pathogenesis, causes, morphology and fate of thrombus.
- 2. 40 yr old male presented with h/o fever, vomiting and diarrhoea. Patient had temperature of 103 degrees F. Weak rapid pulse, hypotension, tachypnoea, cold, clammy, cyanotic skin. Blood culture gram negative bacterial infection positive.
  - (a) What is your diagnosis?
  - (b) Explain the pathogenesis and morphology.

II. Write Notes on:  $(10 \times 1.5 = 15)$ 

- 1. Definition and characteristics of types of necrosis.
- 2. Phagocytosis.
- 3. Paraneoplastic syndromes.
- 4. Gaucher's disease.
- 5. Hypersensitivity reaction II
- 6. Morphological changes in apoptosis.
- 7. Vascular events in acute inflammation.
- 8. Chemokines.
- 9. Morphology of infarct.
- 10. Opportunistic infections in AIDS.

#### III. Short Answers on:

 $(10 \times 1 = 10)$ 

- 1. Write any two stem cell niches.
- 2. Heinz bodies.
- 3. Types of leprosy.
- 4. Mention the cause of thrombocytopenia.
- 5. Bart haemoglobin.
- 6. Types of wound healing.
- 7. Two inherited disorders of platelets.
- 8. Two oncogenic DNA virus.
- 9. Two tumor suppressor genes.
- 10. Two examples of acute phase proteins.

### SECOND YEAR M.B.B.S DEGREE EXAMINATION Paper V – GENERAL PATHOLOGY AND HAEMATOLOGY

Q. P. Code: 524063

Time: Three Hours Maximum: 40 Marks

Answer **ALL** questions.

Draw Suitable diagrams wherever necessary

I. Elaborate on:  $(2 \times 7.5 = 15)$ 

- 1. a) A 12 year boy weighing 70 kgs, doesn't play any outdoor games and is always in front of his play station with lot of snacks besides him. What is he having? What are the methods to assess it?
  - b) What is the etiopathogenesis? Enumerate the complications?
- 2. Define Thrombocytopenia? Classify causes of Thrombocytopenia? Discuss various tests in evaluating bleeding disorders?

II. Write Notes on:  $(10 \times 1.5 = 15)$ 

- 1. Define Virchow's triad?
- 2. Outcomes of acute inflammation?
- 3. Caissons disease
- 4. Morphology of renal changes in SLE
- 5. P 53
- 6. Epstein barr virus
- 7. Leucocyte alkaline phosphatase
- 8. Hemophilia A
- 9. Wilms Tumor
- 10. Amniotic fluid embolism.

#### III. Short Answers on:

 $(10 \times 1 = 10)$ 

- 1. Russell bodies
- 2. Mention two sites of biopsy for amyloidosis?
- 3. Autosomal recessive hematopoietic disorder
- 4. Special stain to diagnose Gaucher's disease
- 5. Fluorescent in situ hybridization
- 6. Name two trisomy syndromes
- 7. Neurofibromatosis gene
- 8. Name two familial cancers?
- 9. Stages of shock
- 10. Mention two sites of oncocytomas.

Q.P. Code: 524063

Time: Three hours Maximum: 40 Marks

**Answer All Questions** 

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. Classify Hemolytic Anemias. Write in detail about the pathogenesis, blood picture and clinical features of beta Thalassemia major.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Growth factors
- 2. Transplant rejection
- 3. Cystic fibrosis.
- 4. Hodgkin Lymphoma

#### III. Short answers on: $(5 \times 2 = 10)$

- 1. Dystrophic calcification
- 2. Gaucher's cell
- 3. Arthus reaction
- 4. Chloroma
- 5. Vitamin C deficiency

## SECOND M.B.B.S. DEGREE EXAMINATION PAPER V – GENERAL PATHOLOGY & HAEMATOLOGY

Q.P. Code: 524063

Time: Three Hours Maximum: 40 marks

**Answer ALL questions** 

I. Elaborate:  $(1 \times 10 = 10)$ 

1. Define Neoplasia. Write in detail about the molecular basis of cancers. Add a note on Oncogenes and their mode of activation.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Pathogenesis of shock.
- 2. Amyloidosis.
- 3. Megaloblastic Anemia.
- 4. Myelofibrosis.

#### III. Short answers on: $(5 \times 2 = 10)$

- 1. Acute phase reactants.
- 2. Le cell.
- 3. Chronic granulomatous disease.
- 4. Langerhans cell histiocytosis.
- 5. Name four Monoclonal Gammopathies.

## SECOND YEAR M.B.B.S. DEGREE EXAMINATION PAPER V – GENERAL PATHOLOGY & HAEMATOLOGY

Q.P. Code: 524063

Time: Three Hours Maximum: 40 Marks

**Answer ALL questions** 

I. Elaborate on:  $(1 \times 10 = 10)$ 

Define apoptosis. What are the causes of apoptosis?
 Write about the biochemical features and mechanisms of apoptosis.
 Add a note on dysregulated apoptosis.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Embolism.
- 2. Stem cells in tissue homeostasis.
- 3. Myelodysplastic syndrome.
- 4. Von willebrand disease.

#### III. Short answers on: $(5 \times 2 = 10)$

- 1. Role of sirutins in cellular aging.
- 2. Wilson's disease.
- 3. Sea blue histiocytosis.
- 4. Agranulocytosis.
- 5. Lead poisoning.

Q.P. Code: 524063

Time: Three hours Maximum: 40 Marks

**Answer All Questions** 

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. Describe the pathogenesis, morphology and clinical features of tuberculosis.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Gangrene.
- 2. Blood picture of chronic myeloid leukemia.
- 3. Disseminated intravascular coagulation.
- 4. Down syndrome.

III. Short answers on:  $(5 \times 2 = 10)$ 

- 1. Name four cell derived mediators of inflammation.
- 2. Differences between benign and malignant tumor.
- 3. Reed Sternberg cell and its variants.
- 4. Define hyperemia and congestion.
- 5. Four opportunistic infections in HIV.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. List the causes of megaloblastic anemia. Discuss about the pathogenesis, morphology and bone marrow picture of megaloblastic anemia.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Morphological patterns of tissue necrosis.
- 2. Tumor markers.
- 3. Klinefelter syndrome.
- 4. Haemophilia.

#### III. Short answers on: $(5 \times 2 = 10)$

- 1. Metaplasia.
- 2. Lipoxins.
- 3. Morphology of thrombi.
- 4. Conditions associated with protein energy malnutrition.
- 5. Russell bodies.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

**Answer All Questions** 

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. Define edema. Tabulate the pathophysiological categories of edema and write in detail about each category with suitable examples and illustrations.

II. Write notes on:  $(4 \times 5 = 20)$ 

- 1. Write about causes of cell injury and write briefly about hyperplasia with suitable examples.
- 2. Write briefly about idiopathic thrombocytopenic purpura pathophysiology, morphology and investigatory findings.
- 3. Write about dystrophic and metastatic calcification.
- 4. Type III hypersensitivity reaction.

#### III. Short answers on: $(5 \times 2 = 10)$

- 1. Enumerate four risk factors for DIC.
- 2. Morphology of granuloma.
- 3. Name the stages of shock.
- 4. Name four virus implicated in carcinogenesis.
- 5. Reticulocyte.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. Define anaemia. Classify haemolytic anaemia. Write in detail about the pathogenesis, clinical features and lab diagnosis of sickle cell anaemia.

II. Write notes on:  $(6 \times 4 = 24)$ 

- 1. Chemical carcinogenesis.
- 2. Different types of giant cells with morphology and examples.
- 3. Protein energy malnutrition.
- 4. Glycogen storage disorders.
- 5. Mechanism of autoimmunity.
- 6. Amniotic fluid embolism.

#### III. Short answers on: $(6 \times 1 = 6)$

- 1. Warthin Finkeldey giant cells.
- 2. Types of necrosis.
- 3. Mention two causes for pancytopenia.
- 4. Mott cell.
- 5. Mention four X- linked recessive disorders.
- 6. Enumerate four examples for metastatic calcification.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on:  $(1 \times 10 = 10)$ 

1. Define Neoplasia. Discuss in detail the pathogenesis, pathophysiology of radiation oncogenesis.

II. Write notes on:  $(6 \times 4 = 24)$ 

- 1. Type II hypersensitivity reaction.
- 2. Von villebrand disease.
- 3. Factors affecting wound healing.
- 4. Obesity.
- 5. Tumor markers.
- 6. Vitamin D deficiency.

#### III. Short answers on: $(6 \times 1 = 6)$

- 1. Hematocrit in dengue fever.
- 2. Dysplasia.
- 3. Phagocytosis.
- 4. Heinz bodies.
- 5. Give two examples of autosomal recessive disorder.
- 6. Actinomycosis.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on: (2+8=10)

1. Define inflammation. Describe the major events of acute inflammation with a note on its outcome.

II. Write notes on:  $(6 \times 4 = 24)$ 

- 1. Type I hypersensitivity reaction.
- 2. Blood and bone marrow picture in multiple myeloma.
- 3. Anti-phospholipid syndrome.
- 4. Mechanism of apoptosis.
- 5. Lab diagnosis of neoplasm.
- 6. Fracture healing.

#### III. Short answers on:

 $(6 \times 1 = 6)$ 

**Sub.Code** :5065

- 1. Sago spleen.
- 2. Microscopic appearance of lepromatous leprosy.
- 3. Mention any four childhood malignancies.
- 4. Enumerate four types of chromosomal rearrangements.
- 5. Virchow triad.
- 6. Reed Sternberg cell.

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on: (4 + 3 + 3 = 10)

1. Define and classify leukaemia. Describe the blood and bone marrow findings in acute myeloid leukaemia.

II. Write notes on:  $(6 \times 4 = 24)$ 

- 1. Complications of myocardial infarction.
- 2. Sideroblastic anemia.
- 3. Tumour metastasis.
- 4. Graft versus host disease.
- 5. Viral haemorrhagic fever.
- 6. Down's syndrome.

#### III. Short answers on: $(6 \times 1 = 6)$

- 1. Morphology of infarction.
- 2. Chloroma.
- 3. Vitamin C deficiency.
- 4. Name four cell derived mediators of inflammation.
- 5. Define hyperplasia and give two examples.
- 6. Anticoagulants.

**Sub.Code** :5065

# M.B.B.S. DEGREE EXAMINATION SECOND YEAR PAPER V – PATHOLOGY – I (GENERAL PATHOLOGY & HAEMATOLOGY)

Q.P. Code: 525065

Time: Three hours Maximum: 40 Marks

#### **Answer All Questions**

I. Elaborate on: (2+8=10)

1. Define and classify shock. Discuss in detail about septic shock.

II. Write notes on:  $(6 \times 4 = 24)$ 

- 1. Classification of acute leukemia.
- 2. Vitamin D deficiency.
- 3. Pathogenesis of aquired immuno deficiency syndrome.
- 4. Asbestosis.
- 5. Coagulation disorders.
- 6. Burkitts lymphoma.

#### III. Short answers on: $(6 \times 1 = 6)$

- 1. Transcription factors.
- 2. Hematopoietic cytokines.
- 3. Asteroid bodies.
- 4. Keloid.
- 5. Mutations in chronic myeloid leukemia.
- 6. Hematocrit in dengue fever.