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

[MBBS 0322] **MARCH 2022** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020 Batch onwards)

SECOND YEAR

PAPER V – PATHOLOGY – I

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. 25 years male RTA victim presented with rapid pulse, cold clammy cyanotic skin, tachypnea and landed in emergency ward in unconscious state what is the diagnosis? Classify the disease write in detail about the pathogenesis, morphology evolution of the disease.

2. 50 / male vegetarian, presented with pallor, paresthesia of extremities O/E he had beefy tongue what is your diagnosis? How will you investigate this patient further and establish the diagnosis. Classify RBC disorders according to etiology.

II. Write Short notes on: **(10 x 5 = 50)**

1. 18 years male your friend was diagnosed as Hodgkin's lymphoma. How will you empathise with him and his family members & support them?

2. Calcification

3. 10 years female was administered an analgesic injection IM and immediately collapsed. What is the type of reaction? What is the Pathogenesis of this reaction?

4. 10 years male presented with evening raise of temperature, neck nodes. His father was treated for cough with expectoration for 6 months. What is your diagnosis? Write about pathogenesis morphology of this illness.

5. 30 years male presented with fever with rigors he had H/o dark coloured urine after admission and also had cloudy consciousness, what is the diagnosis? What is the role of peripheral smear in diagnosis?

6. Pathogenesis of obesity.

7. 60 years male presented with low back ache. He had multiple lytic lesions of bones on skeletal survey. Serum electrophoresis and bone narrow was done to establish diagnosis. What is your diagnosis what are the findings in bone narrow and electrophoresis?

8. Classify transfusion reactions. How will you investigate a case of transfusion reactions?

9. 40 years male with splenomegaly on investigations had total count of 1,20,000 cells / mm^3 and peripheral smear showed predominance of myeloid precursors. What is your diagnosis? Draw diagram of peripheral smear. What is the common genetic event in this condition?

10. Describe normal hemostasis and coagulation cascade

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

[MBBS 0822] **AUGUST 2022** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND YEAR – SUPPLEMENTARY (CBME)
PAPER V – PATHOLOGY – I

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. 30 years female immediately after delivery went into sudden circulatory failure. She had profuse bleeding per vaginum and from venepuncture sites. What is your diagnosis? What is the Pathophysiology? How will you investigate this patient?

2. 1 year male child was brought with loss of vision and mass lesion of the eyeball. There was a family H/o sarcoma of the long bone in the sibling. What is your diagnosis? What is the molecular mechanism involved in this family. Describe the normal cell cycle and how this gene affects cell cycle, Name 3 other genes involved in familial syndromes.

II. Write Short notes on: **(10 x 5 = 50)**

1. 7 years male child is found lying down on the road with convulsions with his mother. How will you react as a medical student and help them?

2. 50 years male who was a diabetic has developed an ulcer in the foot of size 6 x 4 cm. His last toe was covered with necrotic slough. What is your diagnosis? What is the pathogenesis and pathology involved in this complication?

3. 8 years female child was hailing from a poor family and was found to have loss of muscle mass and subcutaneous fat she was emaciated. What is your diagnosis? How will you categorize nutritional disorders?

4. Pathogenesis of amyloidosis.

5. 25 years male had a cut injury in his hand and wound was sutured immediately. How does healing take place in such wound? What are the factors delaying wound healing?

6. What are the sub types of Hodgkin Lymphoma? Also write about types of RS cells.

… 2 …

7. 20 years male following antibiotic intake had total leukocyte count of 1200 cells / mm^3 and absolute neutrophil count of 120 cells. What is your diagnosis? What is the pathogenesis of this condition?

8. Infections transmitted by blood transmission. How will you prevent it?

9. 20 years female had hematocrit of 20%, reticulocytosis, hyperbilirubinemia, peripheral smear revealed anisopoikilocytosis and target cells. What is the pathophysiology of this disease?

10. WHO classification of acute myeloid leukemia.

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[MBBS 0822]

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

[MBBS 0223] **FEBRUARY 2023** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND YEAR – (CBME)

PAPER V – PATHOLOGY – I

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. 35years old male presented with rapid pulse, cold clammy skin, tachypnoea with hypotension admitted in emergency ward. History of fever for more than 1 week with increased total WBC Count.
   a) What is your diagnosis?
   b) Write in detail about the pathogenesis, morphology and how will you evaluate this condition?

2. 8 years old girl presented with malaise and fatigue. On examination yellowish sclera with hepatosplenomegaly noted. Family history revealed similar complaints in her sibling also. Her Hemoglobin level is 7.8 g/dl. X-Ray skull showed "crewcut" appearance.
   a) What is your diagnosis?
   b) Write in detail about etiopathogenesis, morphology and laboratory investigations needed to confirm the diagnosis.

II. Write Short notes on: **(10 x 5 = 50)**

1. Define necrosis and its types.
2. Vitamin D deficiency.
3. Type IV Hypersensitivity reaction.
4. Write short notes on Etiopathogenesis of ITP.
5. Philadelphia chromosome.
6. Describe the morphology of amyloidosis.
7. Enumerate the various anti-coagulants utilized in clinical pathology lab for routine blood investigations. Write about their mechanism and their uses.
8. Opportunistic infections in AIDS.
9. Chemical Carcinogenesis.
10. Write short notes on
    a) Autonomy.
    b) Beneficence.

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

[MBBS 0723] **JULY 2023** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND YEAR – (CBME)

PAPER III – PATHOLOGY – I

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. 30/Male presented with massive splenomegaly his total count was 2,35,000 cells per mm^3 with preponderance of Neutrophilic precursors. Platelet count was 1,80,000 cells per mm^3.
   a) What is your diagnosis?
   b) What is the molecular basis of this disease?
   c) Write about the morphological features in this condition. Classify myeloproliferative neoplasms.

2. 25 years female presented with malar rash on the face, fever, painful joints of fingers.
   a) What is your diagnosis?
   b) Write about the pathogenesis and diagnosis of the disease.

II. Write Short notes on: **(10 x 5 = 50)**

1. 20 years female was diagnosed as extrapulmonary tuberculosis. She is very upset with the diagnosis. How will you support and educate her?
2. Disorders of pigments.
3. What is the role of prostaglandins in inflammation?
4. What is cross matching? Types of cross matching and its importance.
5. What are the types of carcinogens? Write about microbial carcinogens.
6. What do you know about stem cells? What is the role of stem cells in diseases?
7. Von Willebrand disease.
8. 30 years female presented with menorrhagia. She has pallor, koilonychia. What will be the hematological findings in this patient?
9. What are the investigations required in a case of bleeding disorder?
10. 3 years male child had frontal bossing, pigeon chest, bowing of legs. What is the underlying dietary deficiency? What are the metabolic changes due to the deficiency? If seen in adults what is the clinical manifestation?

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

[MBBS 0224] **FEBRUARY 2024** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL YEAR – (CBME)
PAPER I – PATHOLOGY

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. A patient is brought to casualty with multiple superficial and deep injuries. Patient is a known diabetic.
   a) Write in detail about the mechanism of healing and repair of injury.
   b) Discuss about the factors influencing the process of healing and expected complications.

2. 40 years old male with complaints of easy fatigability, history of fever and abdominal pain. On examination, there was Hepatosplenomegaly and his WBC count was 1,08,000/cu.mm, Haemoglobin 8.8g/dl and platelet count 1,00,000/cu.mm.
   a) What is your probable diagnosis?
   b) Write in detail about the etiopathogenesis and other laboratory findings with relevant diagrams.

II. Write Short notes on: **(10 x 5 = 50)**

1. Chemotaxis.
2. Turner's syndrome.
3. Describe in detail the events of invasion and metastasis in neoplasia.
4. Lab diagnosis of DIC (Disseminated Intravascular Coagulation).
5. Vitamin D deficiency.
6. What is informed consent? Discuss the components of an informed consent.
7. Write in detail about pathogenesis and investigation of sickle cell disease.
8. 27 years old female, one week after normal delivery presented with complaints of dyspnoea, irritability with bleeding Pervaginum admitted in postnatal ward. On examination she had hypotension and increased pulse rate. What is your probable diagnosis? What are the causes and other investigations needed to confirm the diagnosis?
9. Leukemoid reaction.
10. Burkitt's lymphoma.

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

[MBBS 0524] **MAY 2024** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL – SUPPLEMENTARY (CBME)
PAPER I – PATHOLOGY
Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. Enumerate the various carcinogenic agents. Write in detail about the process of Carcinogenesis in Carcinoma cervix.

2. 26 years old multipara presented in Obstetric OPD with complaints of easy fatiguability and breathlessness. On evaluation her Hemoglobin level - 6.2 g/dl, serum iron level-40 mcg/dl.
   a) Mention the probable cause of her condition.
   b) Write about the pathogenesis and other investigations needed to confirm the diagnosis.

II. Write Short notes on: **(10 x 5 = 50)**

1. Pathogenesis of cystic fibrosis.
2. Vitamin ‘A’ deficiency – Causes and Pathology.
3. Klinefelter syndrome.
4. Write about the morphologic changes of reversible injury.
5. Blood transfusion is advised for a post tonsillectomy patient. Immediately after starting the transfusion, patient complains of chills with rigors. What is the diagnosis and how will you manage the patient?
6. Blood smear and Bone marrow findings in Megaloblastic anemia.
7. Type II hypersensitivity reaction.
8. What is the screening procedure to be done for a 42 years old female presented in Gynecology OPD with the complaints of leucorrhea? Describe in detail regarding the screening procedure.
9. Define embolism and write about pulmonary embolism.
10. What is empathy? What is the role of empathy in care of patients?

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

[MBBS 1224] **DECEMBER 2024** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL – MBBS (CBME)
PAPER I – PATHOLOGY
Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

(1+5+5+4)

1. A 40-year-old female complaints of loss of weight, massive splenomegaly with very high total count. What is your probable diagnosis? What are the characteristic peripheral smear findings? Describe the course of the disease and possible complications. What is the genetic abnormality involved and brief about lab diagnosis?

(1+10+4)

2. A 40-year-old male presented with history of high-grade fever. Patient had weak rapid pulse, hypotension and tachypnea, cold clammy and cyanotic skin. Blood culture reveals Gram negative bacterial infection. What is your diagnosis? Explain the pathogenesis and morphology with examples. Brief about other possible causes of your diagnosis.

II. Write Short notes on: **(10 x 5 = 50)**

1. Define necrosis and write a note on caseation necrosis.
2. Classify Amyloidosis and describe the morphology of spleen in amyloidosis.
3. Write about Fluorescence in Situ Hybridization (FISH).
4. Write briefly about Idiopathic Thrombocytopenic Purpura, etiology, morphology and investigatory findings.
5. 18 years male your friend was diagnosed as Hodgkin's lymphoma. How will you empathize with him and his family members and support them?
6. Amniotic fluid embolism.
7. Discuss in detail about Paroxysmal Nocturnal Hemoglobinuria.
8. Write about lab diagnosis of iron deficiency anemia.
9. Write in detail about Chemical Carcinogenesis.
10. Infections transmitted by blood transmission. How will you prevent it?

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

[MBBS 0325] **MARCH 2025** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATIONS

(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL – SUPPLEMENTARY - (CBME)
PAPER I – PATHOLOGY

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

(3+7+5)

1. a) Define Neoplasia.
   b) Describe the pathogenesis of Radiation oncogenesis.
   c) What are the characteristics of Benign and Malignant Neoplasms.

(3+5+7)

2. 5-year-old boy presents to ER with complaints of epistaxis and petechiae over the limbs for the past 3 days.
   a) What is the probable condition?
   b) What are the relevant investigations to narrow down the cause?
   c) Write in detail about pathogenesis of Immune mediated cases of the above condition.

II. Write Short notes on: **(10 x 5 = 50)**

1. Tumor markers.
2. Hemophilia.
3. Dystrophic and pathologic calcification.
4. Type I Hypersensitivity reaction.
5. Different types of giant cells with morphology and examples.
6. Protein Energy Malnutrition.
7. Glycogen storage disorders.
8. Mechanism of autoimmunity.
9. Amniotic fluid Embolism.
10. How will you break the news of carcinoma of pancreas and explain the prognosis to the patient/attender?

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

[MBBS 0725] **JULY 2025** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL – (CBME)

PAPER I – PATHOLOGY

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20 MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

(3+4+8)

1. Define Thrombosis. Describe the various etiological factors for Thrombosis. Describe the morphology of Thrombus.

(2+4+4+5)

2. 65/F presenting with severe paresthesia of lower limbs, atrophic glossitis and anemia. On examination low serum vitamin B12 seen.
   What is the diagnosis? Discuss the etiopathogenesis, peripheral blood smear and bone marrow picture for the above diagnosis.

II. Write Short notes on: **(10 x 5 = 50)**

1. Type I Hypersensitivity reaction.
2. Antiphopholipid Antibody Syndrome.
3. Fracture healing.
4. Sideroblastic Anemia.
5. Tumor metastasis.
6. Graft versus Host disease.
7. Down ’s Syndrome.
8. Pathogenesis of Acquired Immunodeficiency syndrome.
9. Asbestosis.
10. How will you counsel the patient with IBD (Inflammatory Bowel Disease)?

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

[MBBS 1025] **OCTOBER 2025** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND PROFESSIONAL – SUPPLEMENTARY – (CBME)

PAPER I – PATHOLOGY

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20 MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

(2+3+5+5)

1. 22 years old female with complaints of butterfly rash over the face, joint pains and photosensitivity. What is your diagnosis and mention about other clinical features? Write in detail about lab diagnosis and morphological changes in various organs.

(2+2+6+5)

2. 8-year-old boy presented with hemarthroses following a trivial injury. H/o easy bruising present.
   a) What is the clinical condition and what is the mode of inheritance?
   b) Explain the pathogenesis and laboratory findings of the clinical condition.

II. Write Short notes on: **(10 x 5 = 50)**

1. Write in detail about Klinefelter Syndrome and genetic abnormality associated with it.
2. Pathogenesis of Amyloid.
3. Define hyperplasia and describe with two examples.
4. ESR and its significance.
5. List five tumour markers with their significance.
6. Pathologic calcification.
7. Warburg effect.
8. Write in detail about Phagocytosis.
9. Classify AML.
10. A 17 years old female with complaints of a mobile lump in the right breast, noticed 2 months back, has come to the cytology laboratory for FNAC of the breast lump. USG of breast shows a well circumscribed mass measuring 3x2x2 cm. How will you proceed with the patient?

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

[MBBS 0826] **AUGUST 2026** **Sub. Code :6063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020 to 2023-2024)

SECOND PROFESSIONAL – CBME

PAPER I – PATHOLOGY

Q.P. Code: 526063

Time: Three hours **Maximum : 100 Marks (80 Theory + 20 MCQs)**

Answer all the Questions

I. Essay: **(2 x 15 = 30)**

1. Enumerate carcinogenic agents and describe the process of Carcinogenesis.
2. 30 years female immediately after delivery went into sudden circulatory failure. She had profuse bleeding per vaginum and from venepuncute sites. What is your diagnosis? What is the Pathophysiology? How will you investigate this patient?

II. Write Short notes on: **(10 x 5 = 50)**

1. Free Radicals Injury.
2. Different types of granulomas with morphology and examples.
3. Lab diagnosis of cancer.
4. Methods for detection of cytogenetic abnormalities.
5. Graft rejection.
6. Mucormycosis.
7. Fat embolism.
8. Type II Hypersensitivity reactions.
9. Hemolytic Uremic syndrome.
10. A young male 25 years old test positive for hepatitis C on a routine blood donation. How do you counsel him for further treatment?

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