April-2001

[KD 113] **Sub. Code : 2016**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

(Common to OR/NR/Revised Regulations)

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Discuss the pathology of free radical injury (25)

2. Discuss the aetiopathogenesis, pathology of hypertension (25)

3. Write briefly on : (5 × 10 = 50)

(a) Salivary gland tumours.

(b) Immunofluorescence in Diagnostic Pathology.

(c) Helico–Bacter Pylori.

(d) Hepatitis–C infection.

(e) Mesothelioma.

November-2001

[KE 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Common to New/Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe briefly the various methods of DNA recombinant techniques and their diagnostic applications in histopathology. (25)

2. Discuss the aetiopathogenesis of septic shock and pathology of different types of shock. (25)

3 Write briefly on : (5 × 10 = 50

(a) Pathogenesis of Myocardial Infarction.

(b) Aetiopathogenesis of peptic ulcer.

(c) Microalbuminuria.

(d) Paraneoplastic syndromes.

(e) Radiation Injury.

March-2002

[KG 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION

(Common to OR/NR/Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Discuss the Pathology and Pathogenesis of Diabetes mellitus. (25)

2 Discuss renal transplant pathology (25)

3. Write short notes on : (5 × 10 = 50)

(a) Cerebral Malaria.

(b) Endomyocardial Biopsy.

(c) Haemolytic jaundice.

(d) Carcinoid Syndrome.

(e) Urine Microscopy.

September-2002

[KH 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Discuss the various causes of Malabsorption Syndrome. What are the various investigation required and their interpretation? (25)

2. Discuss the pathogenesis and pathology of acquired immuno deficiency syndrome. (25)

3 Write briefly on : (5 × 10 = 50)

(a) Applications of insitu hybridization

(b) Viral inclusions

(c) Cysts of jaw

(d) Hyalinizing trabecular adenoma of thyroid

(e) Muscle biopsy.

April-2003

[KI 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

1. Classify jaundice. Give aetiology of various types. Describe briefly laboratory tests done in evaluation of jaundice case. (25)

2. Define shock. Classify shock. Discuss briefly pathogenesis of various types of shocks and morphological changes seen in various organs. (25)

3. Write briefly on : (5 × 10 = 50)

   (a) Disposable of laboratory wastes

   (b) Nontuberculous mycobacterial infections

   (c) Pneumocystic carinii

   (d) Respiratory viruses

   (e) Systemic mycoses.

[KJ 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the Answer Sheet provided as per the instructions on the first page.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

1. Discuss the role of intestinal biopsy in diagnosis of malabsorption syndromes. (15)

2. Discuss an over view of quality control in histopathology services. (15)

3. Write short notes on : (10 × 5 = 50)

(a) Eosinophil in health and disease.

(b) Basis of autoimmune disease.

(c) Haematoxylin in surgical pathology practice

(d) Melanin and its demonstration.

(e) Pulmonary lesions in AIDS.

(f) Cystic disease of kidney.

(g) Role of helicobacter in gastro-duodenal disease.

(h) Prognostic indications of carcinoma breast.

(i) Mechanism of invasion and metastasis.

(j) Respiratory distress syndrome in new born.

[KK 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

A. Essay. (2 × 15 = 30)

(1) Discuss briefly about common fungal Respiratory Infections. (15)

(2) Describe the mechanism of wound healing and factors which influence wound healing. (15)

B. Write short notes on : (10 × 5 = 50)

(1) SARS pathology

(2) Septicemic shock

(3) Acute Renal failure

(4) Viral meningitis

(5) Hepatic Jaundice

(6) Primary Immune deficiency

(7) Collagen types and structure

(8) Pulmonary Infarction

(9) Neuro Syphilis

(10) Chlamydial infections.

[KL 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) Discuss the role of macrophages in health and disease.

(2) Discuss the etiopathogenesis of ascitis and the labaratory tests for its diagnosis.

II. Write short notes on : (10 × 5 = 50)

(a) Interleukins.

(b) Tumour antigens.

(c) Septic shock.

(d) Tumour markers in soft tissue tumours.

(e) Morphologic and biochemical changes in Apoptosis.

(f) Fixatives.

(g) Mucins.

(h) Chemical carcinogens.

(i) Porphyrias.

(j) Immunological classification of Leprosy.

[KM 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) A female patient with fever, arthritis and butterfly rash referred to pathology for investigations. What is the diagnosis? Discuss the etiopathogenesis, pathology and laboratory investigations in such a case. (15)

(2) Discuss COPD. (15)

II. Write short notes on : (10 × 5 = 50)

(a) Cardiomyopathy.

(b) Paraneoplastic syndromes.

(c) Myopathy of small intestine.

(d) Alcoholic hepatitis.

(e) Thymoma.

(f) Prion diseases.

(g) Recent advances in endometrial carcinoma.

(h) Applications of Immuno–Fluorescence Techniques.

(i) Cutaneous lymphomas.

(j) Follicular Neoplasms of Thyroid.

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[KO 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary

I. Essay questions: (2 × 15 = 30)

1. Discuss the classification and diagnosis of cutaneous lymphoproliferative disorders.

2. Discuss the role of predictive and prognostic markers in carcinoma breast.

II. Write short notes on : (10 × 5 = 50)

(a) Opportunistic infections in acquired immune deficiency syndrome (AIDS)

(b) Tumour Markers.

(c) Flourescent in situ Hybridisation (FISH)

(d) Gastro intestinal stromal Tumours (GIST)

(e) Cystic Lesions of Kidney

(f) Pseudo malignant Lesions of prostate

(g) Autopsy in maternal death

(h) Tissue Arrays – construction and application

(i) Cytokeratin immuno profiles in diagnosis

(j) Quality control in cytology.

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[KP 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper I — GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS.

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Discuss the role of electron microscopy and immuno fluorescence in the diagnosis of glomerular lesions of kidney. (20)

(2) Discuss viruses causing haemorrhagic fever. (15)

(3) Discuss the pathology of neuro degenerative diseases. (15)

II. Write short notes on : (6 × 5 = 30)

(a) Biological waste disposal and its significance.

(b) Role of cytogenetics in prenatal diagnosis.

(c) Laboratory diagnosis of diabetes mellitus.

(d) Laboratory investigations in male infertility.

(e) Mechanisms of free radical induced injury.

(f) Anti – neutrophilic – cytoplasmic antibody (ANCA) and its role in various disease states.

[KQ 111] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

GENERAL MEDICAL AND SURGICAL PATHOLOGY

INCLUDING APPLIED ASPECTS IN PATHOLOGY

Common to :

Paper I — (Old/New/Revised Regulations)

(Candidates admitted from 1988 – 1989 onwards)

and

Paper I — (For candidates admitted from 2004 – 2005 onwards)

Time : Three hours — Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

M.C.Q. : Twenty minutes — M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay Questions :

1. Discuss the etiopathogenesis, pathology and complications of diabetes mellitus. (20)

2. Classify and discuss pathology of malabsorption syndrome. (15)

3. Discuss "Squash" technique and squash cytology in C.N.S. Tumors. (15)

II. Write Short notes on : (6 × 5 = 30)

(a) Fish

(b) Role of NO (Nitric Oxide) in shock

(c) Laboratory diagnosis of meningitis

(d) Utility of Immunofluorescence in skin biopsy

(e) Autopsy findings in a case of cerebrovascular accident

(f) Wegener's Granulomatosis.

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[KR 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

GENERAL MEDICAL AND SURGICAL PATHOLOGY

INCLUDING APPLIED ASPECTS IN PATHOLOGY

Common to :

Paper I — (Old/New/Revised Regulations)

(Candidates admitted upto 2003–2004)

and

Paper I — (For candidates admitted from 2004–2005 onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw diagrams if necessary.

I. Essay questions:

(1) Discuss the classification, histopathology, diagnosis and features of Hansen's Disease. (20)

(2) Discuss the causes, pathogenesis and histopathology of non-alcobolic fatty liver disease. (15)

(3) Discuss the pathogenesis and clinico-pathological features of coronary artery disease. (15)

II. Write short notes on: (6 × 5 = 30)

(a) Quality control in histopathology

(b) Accreditation and reaccreditation of pathologists

(c) Laboratory diagnosis of autoimmune diseases

(d) Chemokines and chronic idiopathic inflammatory bowel disease

(e) Diabetic microangiopathy.

(f) Screening for haemoglobinopathies.

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MARCH 2008

[KS 113] **Sub. Code : 2010**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Common to all candidates

Q.P.Code : 202010

Time : Three hours Maximum : 100 marks

Answer ALL questions.

Draw suitable diagram's wherever necessary.

I. Long Essay : (2 × 20 = 40)

1. Discuss etiopathogenesis of acute renal failure following obstetrical intervention and write the role of laboratory management of the same.

2. Discuss the morphology and clinico pathological syndromes of viral hepatitis.

II. Write short notes on : (10 × 6 = 60)

1. Approach to Autospy in AIDS.

2. Isoenzymes.

3. Laboratory diagnosis of cancer.

4. Gene therapy.

5. Cell adhesion proteins.

6. Paraxysmal nocturnal hemoglobinuria.

7. Direct DNA diagnosis.

8. Role of prothrombin time in monitoring the effects of oral anticoagulant therapy.

9. Laboratory diagnosis of hemolytic anemia.

10. Chemokines.

September 2008

[KT 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATIONS

Branch III – Pathology

Paper I - GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

(Common to all candidates)

Q.P. Code : 202010

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions : **(2 X 20 = 40)**

1. Discuss the causes, pathogenesis and morphology of cardiomyopathies.

2. Define Neoplasia. Discuss staging, grading systems and types of spread of tumors. Discuss the pathogenesis, initiation, induction and promotion of neoplasia by chemical carcinogens.

II. Write short notes on : **(10 X 6 = 60)**

1. Structure of endoplasmic reticulum.
2. Cytokines.
3. Ochronosis.
4. Discuss the 4 types of transplantation grafts.
5. Familial adenomatous polyposis.
6. Fragile chromosomes.
7. Describe hard and soft tubercle.
8. Lepromin test.
9. pathology of steatosis.
10. Asbestosis.

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March 2009

[KU 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : **(2 x 20 = 40)**

1. Discuss causes, pathogenesis and morphology, complications of H.pylori infection.

2. Discuss etiopathogenesis and morphology of childhood tumors.

II. Write short notes on : **(10 x 6 = 60)**

1. Histopathologist and law.
2. Pathology of collagen.
3. Glycogen storage disorder.
4. Albinism.
5. Pathological calcification.
6. Chemical mediaters.
7. Anaphylaxis.
8. Granulomas.
9. Pathology of vitamin A deficiency.
10. HLA system.

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September 2009

[KV 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : **(2 x 20 = 40)**

1. Discuss the morphology, etiopathogenesis, clinical features, course and diagnosis of idiopathic inflammatory bowel disease.

2. Define regeneration and healing. Discuss the various mechanisms which control normal cell proliferation.

II. Write short notes on : **(10 x 6 = 60)**

1. Cytoskeletal abnormalities
2. Free radicals
3. Lysosomal storage diseases
4. Graft versus host reaction
5. Tumour antigens
6. Neonatal respiratory distress syndrome
7. Vascular pathology in hypertension
8. Desquamative interstitial pneumonia
9. Thrombolitic microangiopathies
10. Muscle biopsy

*****

March 2010

[KW 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : **(2 x 20 = 40)**

1. Discuss the pathology of multiple organ failure syndrome.

2. What procedure is adopted to establish diagnosis of jaundice with regard to its type and cause in a child of one year? Discuss the principles and fallacies of various tests if any.

II. Write short notes on : **(10 x 6 = 60)**

1. Biochemical waste management - present scenario.
2. Infections in immuno-compromised patients.
3. Asbestos related neoplasia.
4. Role of immunoflorescence in understanding glomerulonephritis.
5. Current concepts of obesity.
6. Polymerase chain reaction – application in diagnostic pathology.
7. Perinatal autopsy.
8. Barr body.
9. Complications of repair reaction.
10. Electrophoresis.

*****

September 2010

[KX 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

Branch III – Pathology

Paper I - GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

(Common to all candidates)

Q.P. Code : 202010

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions : **(2 X 20 = 40)**

1. Discuss the role of endothelial cells in health and disease.

2. Discuss the etiopathogenesis of Hepatic failure.

II. Write short notes on : **(10 X 6 = 60)**

1. Neuropathology of hypoxia.
2. Recent concepts of Alzheimer's disease.
3. Role of mucosal biopsies in diagnosis of malabsorption syndrome.
4. Mechanism of irreversible cell injury.
5. Pathology in various organs in Diabetes mellitus.
6. Multiple organ failure.
7. Idiopathic inflammatory bowel disease.
8. Muscle Biopsy.
9. ARDS.
10. Graft versus host reaction.

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MAY 2011

[KY 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Discuss the role of free radicals in Ischemic reperfusion injury.	6	15	10
2. Classify Tumours of prostate. Describe tissue sampling and biopsy interpretation in Prostatic Adeno carcinoma in TURP specimens. Mention the prognostic factors.	6	15	10
II. Short Questions:			
1. Signet ring cell lymphoma.	3	8	5
2. Neuro Endocrine neoplasms of uterine cervix.	3	8	5
3. Interpretation of synovial biopsy.	3	8	5
4. Architectural pattern in soft tissue tumors.	3	8	5
5. Prions disease.	3	8	5
6. Application of Immunomarkers by algorithmic approach to diagnose unclassified tumors.	3	8	5
7. Grading of cellular rejection in cardiac transplant biopsies.	3	8	5
8. Hirschsprung disease.	3	8	5
III. Reasoning Out:			
1. 40 year old chronic smoker, sand blaster by occupation died of road accident. At autopsy gross examination of the lungs, shows discrete hard coalescent nodules and with foci of cavitation. Hilar nodes are calcified a) What is the possible diagnosis? b) What is the histopathology of the lesion? c) Describe the pathogenesis. d) Mention the associated lung disease.	4	10	5
2. 45 year old bus driver a chronic smoker with H/O several episodes of chest pain died while on duty. At autopsy, the time of death reveals within 6 hr. Heart examination shows nil grossly abnormal findings. Post mortem angiogram shows zone of myocardial hypoperfusion in the posterior left and right			

(PTO)

	Pages (Max.)	Time (Max.)	Marks (Max.)
ventricles, with absent filling capillaries. a) What is the cause of death? b) What stain was used to demonstrate the lesion in the heart? c) Describe the Biochemical basis and microscopic features. d) Enumerate the serological assay to diagnose the lesion.	4	10	5
3. 20 year old foot-ball player with history of joint pain following injury and relieved after aspirin. a) Mention the inflammatory response. b) Describe the pathological events and the site of action of aspirin. c) What is the risk of repeated ingestion of the drugs?	4	10	5
4. 7 year old child admitted with hepatosplenomegaly with anemia and leucopenia. On hematological examination, his bone marrow biopsy revealed clusters of large cells with crumpy tissue paper like cytoplasm. a) Name the diagnostic cell. b) Describe the biochemical basis of the lesion. c) Mention the pattern of inheritance. d) Describe the morphological features and how to demonstrate the diagnostic lesion.	4	10	5
IV. Very Short Ansers :			
1. Enumerate Cystic neoplasms in Pancreas.	1	4	2
2. Super Antigens.	1	4	2
3. Enlist any four trace elements and their deficiency syndromes.	1	4	2
4. Mention various mesothelial cell morphology in Pleural / peritoneal fluid cytology.	1	4	2
5. Enumerate four ‘Blastemal’ Tumors with its cytogenetics and immunostain.	1	4	2
6. Limitation in molecular diagnostic techniques.	1	4	2
7. What is blocking of tissue and which paraffin wax is ideal for blocking tissue?	1	4	2
8. Enumerate obesity associated diseases.	1	4	2
9. Enlist the classes of Proteases in tumor cell invasion.	1	4	2
10. What is chromaffin reaction? Mention its application.	1	4	2

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April 2012

[LA 113] **Sub. Code: 2010**

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY
Q.P. Code : 202010

Time : 3 hours **Maximum : 100 marks**
(180 Min)

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Classify endometrial epithelial metaplasia. Describe clinical association, possible etiopathogenesis and microscopic features for each type.	9	15	10
2. Define atherosclerosis. Describe risk factors, pathogenesis, pathology and consequences of atherosclerosis	9	15	10
II. Short Questions:			
1. Discuss Lymphocyte-Macrophage interaction underlying resistance to Mycobacterium tuberculosis.	3	8	5
2. Define GERD and briefly outline its pathophysiology.	3	8	5
3. Discuss briefly about key to successful macrophotography.	3	8	5
4. Summarize predictive and prognostic molecular markers in breast carcinoma.	3	8	5
5. Discuss etiopathogenesis and pathology of hemodynamic pulmonary edema.	3	8	5
6. Tabulate the spectrum of chronic obstructive pulmonary diseases.	3	8	5
7. What are the initiating and contributing factors for the development of ascites in patients with cirrhosis of the liver.	3	8	5
8. Briefly outline the pathogenesis of ARDS.	3	8	5
III. Reasoning Out:			
1. A 40 year old man with a 15 year history of Type I Diabetes Mellitus has microaneurysms and retinal hemorrhages. Which of the following is the pathogenesis of the retinal lesions? a) Inflammation of the optic nerve b) Microangiopathy c) Non enzymatic glycosylation. d) Osmotic damage	5	10	5
2. A 35 year old man presented with fever, night sweats and weight loss. An opacity in the apex of the right lung was biopsied which showed granulomatous (PTO)			

inflammation with central necrosis and peripheral lymphocytes and Langhan's Giant cells. Which of the following describes the type of necrosis that was present?

a) Caseous necrosis
b) Coagulation necrosis
c) Enzymatic fat necrosis
d) Liquefactive necrosis 5 10 5

3. A 26 year old man with AIDS has experienced progressive loss of visual acuity in both eyes for the past 4 months. Intraocular pressure was normal. The CD4 T cell count was 48 cells / cu mm. Retinal examination showed white areas with indistinct borders. Which of the following pathogen is the most likely causal agent?
   a) Candida albicans
   b) Cytomegalovirus
   c) Toxoplasma gondii
   d) Human Immunodeficiency Virus 5 10 5

4. A 2 year old boy with Bruton's agammaglobulinemia has recurrent pneumonia caused by Streptococcus pneumonia. Which of the following factors is the most likely cause of increased susceptibility to bacterial infections?
   a) Leukocyte adhesion molecule defect
   b) Neutrophil chemotactic defect
   c) Neutrophil microbicidal defect.
   d) Neutophil opsonization defect 5 10 5

IV. Very Short Answers:

1. What are the cystic lesions that occur in the neck?	1	4	2
2. What is necrotizing enterocolitis?	1	4	2
3. What is Krukenberg Tumour?	1	4	2
4. What are the pathologic findings seen in the muscle biopsy in myopathic disorders?	1	4	2
5. What are the factors strongly associated with and contributing to the pathogenesis of NAFLD?	1	4	2
6. What is a stag horn calculus?	1	4	2
7. What is Budd Chiari syndrome?	1	4	2
8. What are the extra pulmonary sites most commonly involved in Tuberculosis?	1	4	2
9. What are true & pseudo rosettes?	1	4	2
10. What are leukoplakia and erythroplakia?	1	4	2

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[LB 113] **OCTOBER 2012** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Classify Diabetes Mellitus. Discuss pathogenesis of Types I and II Diabetes Mellitus. Describe morphology of the various organs affected by the disease.	9	15	10
2. Define Osteomyelitis. Discuss etiopathogenesis, Pathology, clinical course and complications of Pyogenic and tuberculous Osteomyelitis.	9	15	10
II. Short Questions:			
1. Discuss usefulness of radiographs in fetal, perinatal and pediatric autopsies.	3	8	5
2. What is the mechanism of Tumour angiogenesis?	3	8	5
3. Describe the gross & histopathological changes in Radiation injury to the Gastrointestinal tract.	3	8	5
4. What are the sickle cell syndromes?	3	8	5
5. What are the classification criteria for the diagnosis of SLE?	3	8	5
6. Tabulate the clinical & epidemiologic features of Viral Hepatitis.	3	8	5
7. Classify major mechanisms of glomerular injury.	3	8	5
8. What are the most common opportunistic infections in the renal transplant recipient?	3	8	5
III. Reasoning Out:			
1. A 10 year old boy with a family history of seasonal allergies develops erythema, itching and swelling of the skin after an insect bite. Which of the following chemical mediators is most responsible for this skin reaction? a) Bradykinins b) Complement c) Histamine d) Nitric Oxide	5	10	5
2. A 60 year old man with alcoholic cirrhosis has ascites and pitting pedal edema in the lower legs. The cause			

of the fluid accumulation is

a) Decreased plasma oncotic pressure
b) Increased plasma hydrostatic pressure
c) Increased vascular permeability due to Histamine.
d) Lymphatic obstruction with lymphedema 5 10 5

3. A 21 year old man shows bilateral raised yellow patches on the eyelids and a Xanthoma of the Tendoachilles. He has a family history of death due to myocardial infarction and stroke by 30 to 40 years of age. Which of the following mechanism best explains the pathogenesis of the tendon and skin lesions?
   a) Decreased activation of capillary lipoprotein lipase.
   b) Deficiency of apolipoprotein C-H
   c) Deficiency of apolipoprotein E
   d) Deficiency of low density lipoprotein (LDL)receptor. 5 10 5

4. A 60 year old female on treatment for a NHL developed a vesiculo bullous lesion spread over the skin of the L2 dermatome, Which of the following best characterizes the pathogenesis of the lesion?
   a) Photosensitive reaction to a drug
   b) Reactivation of a latent virus in the sensory dorsal Root ganglion.
   c) Skin invasion by malignant CD4 T cells.
   d) Toxin producing strain of Streptococcus pyogenes . 5 10 5

IV. Very Short Answers:

1.	What are the Jones' criteria for Rheumatic fever?	1	4	2
2.	Name clinical conditions / situations where liver biopsy is of proven value.	1	4	2
3.	What is pseudo gout?	1	4	2
4.	Reed Sternberg Cell.	1	4	2
5.	What are the isolates usually identified as etiological factors in hospital acquired pneumonias?	1	4	2
6.	Name the various sites / organs in which adenoid cystic carcinomas can occur.	1	4	2
7.	What is Solitary rectal ulcer syndrome?	1	4	2
8.	How is the muscle to be biopsied selected?	1	4	2
9.	What is Mallory Weiss syndrome?	1	4	2
10.	Write briefly about the hyper plastic conditions of the endometrium.	1	4	2

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(LC 113) APRIL 2013 Sub. Code: 2010

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time: Three Hours **Maximum: 100 marks**

I. Essay: **(2X10=20)**

1. Write about Dendritic cells in normal and in diseases.
2. Write in detail about Bilirubin metabolism and discuss about the pathophysiology of Jaundice.

II. Short Questions: **(8X5=40)**

1. Mediators of Type I Hypersensitivity reaction
2. Collagens and its uses
3. Immunological mechanism of non infectitious vasculitis
4. Functions of Vitamin A
5. Nerve biopsy
6. Porcelain gall bladder
7. Hypertensive cerebrovascular disease
8. Psuedogout

III. Reasoning Out: **(4X5=20)**

1. A 44 year old male underwent renal transplantation. After one month, he was admitted with fever, anemia, and oliguria. His serum creatinine was 2.2
   a. What is your diagnosis?
   b. Describe the morphology of the lesion in this case.
2. A 40 yr. old female presented with post coital bleeding for 4 months. Pap smear was done followed by cervical biopsy.
   a. Discuss the differential diagnosis
   b. Write the morphology of the lesion
3. A 62 year old male developed abscess in the leg for which incision and drainage was done. The wound took long time to heal.
   a. Discuss the cause for delayed healing.
4. A 56 yr. old male admitted with pain over epigastric region and subscapular area , nausea, vomiting. Serum bilirubin was 2.5 mg/dl, serum amylase was 3288 U/L
   a.Describe the etiopathogenesis
   b.Write about the morphology of the organ involved in the lesion.

IV. Very Short Answers: **(10X2=20)**

1. Granules of eosinophils
2. Risk factors of angiosarcoma Liver
3. Amyloid proteins
4. Doughnut granuloma
5. Blue doom cyst of Bloodgood
6. Bcl -2 gene
7. Pulmonary meningioma
8. Atypical leiomyoma
9. Diagnostic criteria of prostatic intraepithelial neoplasia
10. Wolman disease

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[LD 113] **OCTOBER 2013** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

GENERAL MEDICAL AND SURGICAL PATHOLOGY

INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time: Three Hours **Maximum: 100 marks**

I. Essay: **(2 x 10 = 20)**

1. Discuss the pathogenesis, pathology and epidemiology of gastric carcinoma.

2. Briefly describe the histological appearances of the malignant round cell tumours of childhood including the immunohistochemical stains you would use to categorise each.

II. Short Questions: **(8 x 5 = 40)**

1. Craniopharyngioma.
2. Histopathology of polyarteritis nodosa.
3. Adenomatoid tumour.
4. Histological patterns in testicular biopsies of infertile men.
5. Use and limitations of electron microscopy.
6. Grading of Carcinoma breast.
7. Membranous glomerulonephritis – clinical and microscopic features.
8. Staining methods to detect fungi in tissue sections.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 10-year-old boy with a family history of renal disease has auditory nerve deafness, corneal dystrophy, and ocular lens dislocation and microscopic hematuria. Renal biopsy shows irregular basement membrane thickening and attenuation of glomerular capillaries with splitting of the lamina densa, increased mesangial matrix and foamyepithelial cells. The most likely diagnosis is

a . IgA nephropathy
b. Alport syndrome
c. Renal dysplasia
d. Goodpasture's syndrome

2. A 60-year-old woman presented with diffuse abdominal pain for the past 2 months. Investigations show a 3 cm adrenal mass composed of cells closely resembling adrenal cortex. The presence of which of the following features would suggest that this mass is malignant?

a. Nuclear pleomorphism
b. Increased mitotic activity
c. Vascular invasion
d. Necrosis

[PTO]

3. A primigravida was admitted with hypotension due to severe vaginal bleeding associated with a low-lying placenta. Postpartum, she was unable to breast-feed her baby and complained of pronounced fatigue. Laboratory findings include hyponatremia, hyperkalemia, and hypoglycemia. Which of the following is she most likely to have had?
    a. Adrenal haemorrhage
    b. Pituitary necrosis
    c. Bacterial infection
    d. Shock

4. At autopsy, the lungs of a 55 year-old showed greatly dilated bronchi and bronchioles filled with yellowish secretions. The bronchioles could be followed upto the pleural surface. The findings were most marked in the lower lobes. The most likely diagnosis is:
    a. Chronic bronchitis
    b. Bronchiectasis
    c. Bronchial asthma
    d. Emphysema

IV. Very Short Answers: **(10 x 2 = 20)**

1. Gliosis.
2. Angiomyolipoma.
3. Two examples of heterotopia.
4. Hydrosalpinx.
5. Metachromasia.
6. Leukemoid reaction.
7. Effects of drying on a Papanicolaou smear.
8. Staining methods for amyloid.
9. Fine needle aspiration cytology findings in Hashimoto's thyroiditis.
10. Carcinoma associated with woodworkers.

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[LE 113] **APRIL 2014** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three hours **Maximum : 100 marks**

I. Essay: **(2X10=20)**

1. Define emphysema. What are the types of emphysema? Discuss in detail the pathogenesis, morphology and complications of emphysema.

2. What is obesity? Discuss in detail the mechanism by which obesity is associated with cancer risk.

II. Write short notes on: **(8X5=40)**

1. Write a note on Rathke cleft cyst?
2. Mechanism of tissue fibrosis in SLE?
3. Write briefly on seborrheic keratosis?
4. Enumerate the marrow tumors and describe morphology of Ewings sarcoma.
5. What are the common molecular alterations in breast cancer?
6. What is the role of cytology in diagnosis of ovarian carcinoma?
7. What is osteosclerotic myeloma? What is the syndrome associated with it?
8. What is the pathogenesis of gas gangrene?

III. Reasoning Out: **(4X5=20)**

1. 60 yr old male who is a known hypertensive presented with anaemia , fatigue and ebema & died of renal failure. What will be the appearance of kidney on autopsy?

    a. Leathery granularity on surface
    b. Symmetrically contracted
    c. Flea bitten kidney
    d. Irregularly scarred kidney

2. 40 yr old male presented with mass in right testis. Histopathology showed tumor with cells positive for c-kit & placental alkaline phosphatase. What is the tumor?

    a. Embryonal carcinoma
    b. Seminoma
    c. Yolk sac tumor
    d. Teratoma

3. 25 yr old male presented with a solitary nodule of left lobe of thyroid with cervical lymphadenopathy. What will be the probable cytology of the lymphnode?

    a. Reactive lymphadenitis
    b. Follicular carcinoma deposit
    c. Papillary carcinoma deposit
    d. Benign epithelial inclusion

4. 3 yr old female child presented with a rapidly growing orbital mass with loss of vision. Microscopy showed small round cells and spindle cells with myxoid intercellular areas. What is your diagnosis?

    a. Alveolar rhabdomyosarcoma
    b. Schwannoma
    c. Embryonal rhabdomyosarcoma
    d. Retinoblastoma

IV. Very Short Answers: (10X2=20)

1. Which is the most common primary malignant tumor of salivary gland?
2. What is the special stain for HbsAg?
3. Who defined tumor?
4. What is pseudo epitheliomatous hyperplasia?
5. Name the CNS tumors that show eosinophilic granular bodies
6. Name 5 tumors with psammoma bodies.
7. Which is the ideal fixative for bone marrow biopsy?
8. Cytogenetics of Downs syndrome
9. What causes bread and butter pericarditis?
10. What is the diagnostic microscopic feature of primary biliary cirrhosis?

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[LF 113] **OCTOBER 2014** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I - GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three hours **Maximum : 100 marks**

I. Essay: **(2 x 10 = 20)**

1. Describe in detail the classification and etiopathogenesis of diabetes mellitus. Add a note on its complications.

2. Discuss the mechanisms of autoimmune diseases. Describe the etiopathogenesis, pathology and lab diagnosis of SLE.

II. Write short notes on: **(8 x 5 = 40)**

1. Triple negative breast cancer.
2. Prognostic factors in testicular tumors.
3. Radiation induced changes.
4. Metabolic syndrome.
5. Asbestosis.
6. Malignant melanoma.
7. Infective endocarditis.
8. Crescentic glomerulonephritis.

III. Reasoning Out: **(4 x 5 = 20)**

1. 25 year old female presented with ovarian mass and elevated serum AFP.

   A. What is your diagnosis?
   B. What are the other tumors in the same classification?
   C. What is the morphology of this tumor?

2. 20 year old female presented with neck rigidity and CSF examination revealed Cob web appearance on standing and lymphocytic pleocytosis.

   A. What is your diagnosis?
   B. What is the mode of infection?

C. What are the complications?
D. How do you confirm the diagnosis?

3. 60 year old female presented with pain and swelling in the right knee. Xray revealed narrowing of joint space and osteophytes.

   A. What is your diagnosis?
   B. What is the pathogenesis of the disease?
   C. What is the morphology?

4. 35 year old male presented with paroxysmal episodes of hypertension, palpitation, headache and sweating. Imaging revealed retroperitoneal mass. Urinary VMA was elevated.

   A. What is your diagnosis?
   B. What are the genetic syndromes associated?
   C. What is the morphology?
   D. What are the prognostic factors?

IV. Very Short Answers: (10 x 2 = 20)

1. Homer wright rosettes.
2. Denys drash syndrome.
3. Nevus flammeus.
4. Kawasaki disease.
5. Collar button lesion is seen in _____tumor. What is it?
6. Gross test to confirm myocardial infarct.
7. Papillary cystadenoma lymphomatosum.
8. Metastatic Crohn's disease.
9. PSA velocity.
10. VIPoma.

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[LG 113] **APRIL 2015** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Essay: **(2 x 10 = 20)**

1. Etiologic classification of jaundice. Describe the lab tests done in the evaluation of Jaundice.

2. What are the causes of cardiomyopathy? Describe the Etiopathogenesis and morphology of various types of cardiomyopathy.

II. Write notes on: **(8 x 5 = 40)**

1. H. Pylori in gastro duodenal disease.
2. Macrophages in health and disease.
3. Acute renal failure.
4. Perinatal autopsy.
5. Biological waste disposal and its significance.
6. Ethical aspects in pathology.
7. Current concepts of obesity.
8. Chemokines.

III. Reasoning Out: **(4 x 5 = 20)**

1. 35 / M was brought to ICU with core body temperature of 42 degree Celsius,
   A. What are the clinical features?
   B. What is the pathogenesis?

2. 45 / M was complaining of chest pain for 30 minutes and was not relieved by rest.
   A. What is your diagnosis?
   B. What is the pathogenesis and clinical course?

3. 40 / M who was a sand miner by occupation developed cough and breathlessness for 2 months.
   A. What is your probable diagnosis?
   B. What is the pathogenesis?
   C. What is the morphology?

4. 35 / F was on intrauterine device and was forgotten for 10 years .
   She was complaining of foul smelling vaginal discharge.

   A. What are the complications?
   B. What are the common organisms?

IV. Very Short Answers: **(10 x 2 = 20)**

1. Cystic neoplasms in pancreas.
2. Serrated adenoma.
3. Struvite stone.
4. Durck granuloma.
5. Lardaceous spleen.
6. Argentaffin reaction.
7. Formalin pigment.
8. Museum mounting fluid.
9. Trace elements and their deficiency states.
10. Proteases in tumor cell invasion.

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[LH 113] **OCTOBER 2015** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code : 202010

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Essay: **(2 x 10 = 20)**

1. Describe the pathology of neurodegenerative disorders.
2. Discuss in detail the etiopathogenesis and morphology of viral hepatitis.

II. Write Short notes on: **(8 x 5 = 40)**

1. Lab diagnosis of meningitis.
2. Squash in CNS tumors.
3. Diabetic microangiopathy.
4. ANCA and its role in diseases.
5. Internet resources in pathology.
6. Digital photography in pathology.
7. Agents of bioterrorism.
8. Tumor antigens.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 45 year old RTA patient was comatose and was put on mechanical ventilator.

   A. What are the hospital acquired infections he is prone for?

   B. Describe the various organisms and pathogenesis of hospital acquired Infections.

2. 25 year old PRIMI Gravida gave birth to a live fetus at 34 weeks of gestation.

   A. What are the fetal, maternal causes for such an incident?

   B. What are the fetal complications in such a case?

[PTO]

3. 50 / F Known case of carcinoma breast received radiation for 2 months in the post operative period.

   A. What are the main determinants of biologic effects of radiation?

   B. What are the morphologic changes in the cells?

4. 55 / M Known hypertensive for 15 years presented with hypotension and was brought in a state of shock. Examination revealed massive Intra Peritoneal hemorrhage.

   A. What is the probable cause?

   B. What is the pathogenesis and morphology of this condition?

IV. Very Short Answers: **(10 x 2 = 20)**

1. Fibrinoid necrosis.
2. Membrane attack complex.
3. Advanced glycation end products.
4. Salt wasting syndrome.
5. Erythema induratum.
6. Mercurial fixatives.
7. Special stain for copper.
8. Ragged red fibers.
9. Subacute sclerosing panencephalitis.
10. Special stains for ameba.

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[LI 113] APRIL 2016 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 10 = 20)**

1. Classify salivary gland tumours. Discuss recent concepts in pathology of malignant epithelial neoplasms of salivary glands.

2. Define and classify pneumoconiosis. Discuss etiopathogenesis of three important pneumoconiosis.

II. Write short notes on: **(8 x 5 = 40)**

1. Thymoma.
2. MEN (Multiple Endocrine Neoplasia).
3. Synovial biopsy.
4. Hypersplenism.
5. Immunology of leprosy.
6. Testicular lymphoma.
7. Premalignant lesions of large bowel.
8. Aschoff bodies.

III. Reasoning Out: **(4 x 5 = 20)**

1. A post menopausal woman presented with bleeding per vaginum. Endometrial biopsy showed endometrial hyperplasia. Ultrasound revealed a solid and cystic mass in the right ovary. What is the probable microscopic picture of the ovarian tumour? What is the marker for this tumour? What are the variants?

2. A 20 year old male presented with expansile osteolytic lesion in the wrist. Margins are well circumscribed with no sclerosis. FNAC of the lesion was done. Discuss the differential diagnosis in cytology.

3. A smoker presented with cough, haemoptysis and dyspnoea. Radiology revealed a mass in the left lower lobe with hilar lymphadenopathy. Discuss the investigations for the diagnosis of the lesion.

4. A 23 year old female presented with swelling in front of neck and exophthalmos. Discuss the pathology of the lesion and investigations for confirmation of the diagnosis.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Trousseau sign.
2. Barrett oesophagus.
3. Bence Jones protein.
4. TRAP test.
5. Bouin's fixative.
6. Angiokeratoma.
7. Uses of elastic stains in histopathology.
8. Granuloma in the liver.
9. Autopsy finding in lung in a case of amniotic fluid embolism.
10. Reactive mesothelial cell vs malignant epithelial cell in fluid cytology.

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[LJ 113] OCTOBER 2016 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 10 = 20)**

1. Discuss about etiopathogenesis, morphology, clinical and laboratory findings in Myocardial Infarction.

2. Define amyloidosis. Discuss etiopathogenesis, physical and chemical properties of amyloid. Add a note on stains for amyloid.

II. Write short notes on: **(8 x 5 = 40)**

1. Fixatives in cytology.
2. Lupus nephritis.
3. Subependymal giant cell astrocytoma (SEGA).
4. Variants of papillary carcinoma thyroid.
5. Pseudoangiomatous stromal hyperplasia (PASH).
6. Screening programme for cancer cervix.
7. Pulmonary alveolar proteinosis.
8. Psoriasis.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 60 year old male was bedridden following surgery. He complained of pain in the calf muscles on squeezing. He suddenly developed breathlessness and died. What is the probable cause of death? What will the findings be in autopsy?

2. A 50 year gentleman hailing from West Bengal presented with nodular lesions in face and upper limbs with hyper pigmentation of the skin. He had fever with weight loss and hepatosplenomegaly. FNAC was done from the skin lesion. What is the probable finding in the smear? Discuss the differential diagnosis.

3. A 65 year old male presented with bilateral painless testicular swelling. Discuss the differential diagnosis and investigations required for confirmation of the diagnosis.

4. A 50 year old female with pain and swelling of small joints of fingers and wrists on both sides with complaints of stiffness in the morning. What is the probable diagnosis? Discuss the pathology and morphology of the condition with a note on the investigations for confirming the diagnosis.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Bacillary angiomatosis.
2. What is the meaning of mosaicism in genetics?
3. Neurofibrillary tangle.
4. Meckels diverticulum.
5. Poly cystic ovarian disease.
6. H.pylori and disease in humans.
7. Placental site trophoblastic tumour.
8. Multicystic renal dysplasia.
9. Stellate scar in pathology.
10. Malakoplakia.

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[LK 113] MAY 2017 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 10 = 20)**

1. Define atherosclerosis. Enumerate the risk factors. Discuss the pathogenesis, pathology and complications of atherosclerosis.

2. Discuss paediatric renal tumours with a note on molecular biology of the tumours.

II. Write short notes on: **(8 x 5 = 40)**

1. Branchial cleft cyst.
2. P – ANCA, c – ANCA.
3. Fibrous dysplasia.
4. Role of Imprint cytology in diagnosis.
5. Phaeohyphomycosis.
6. RosaiDorfmann disease.
7. Toxoplasmosis.
8. Markers for hepatocellular carcinoma.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 60 year old male presented with headache and seizures. CT brain showed a ring enhancing lesion in right frontoparietal region. Discuss the differential diagnosis. How do you confirm the diagnosis?

2. A 50 year old gentleman who has been a diabetic for the past 10 years is found to have albuminuria. Discuss the morphology of the renal lesion.

3. A 4 year old child presented with matted cervical lymph nodes, evening rise of temperature, loss of appetite. FNAC of the cervical node was done. What will be the findings in FNAC smear? What is the differential diagnosis in cytology? What are the investigations you would suggest for confirming the diagnosis?

4. A 60 year old gentleman came to the outpatient department with a complaint that his hat size kept changing of late. What is the probable diagnosis? Discuss the pathology of the condition.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Warburg effect.
2. Psammoma bodies.
3. Gas gangrene.
4. Perineural invasion.
5. Genes associated with apoptosis.
6. Sugar tumour.
7. Anchovy sauce pus.
8. EBOLA virus.
9. Nutmeg liver.
10. Prognostic factors in osteosarcoma.

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[LL 113] OCTOBER 2017 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 10 = 20)**

1. Classify ovarian tumors and describe in detail about epithelial tumors.
2. Morphological characteristics, pathogenesis of cirrhosis, write about viral cirrhosis.

II. Write short notes on: **(8 x 5 = 40)**

1. Role of immunofluorescence in skin biopsy.
2. Metabolic bone diseases.
3. Neurofibromatosis.
4. Vascular malformations of brain.
5. Quality control in routine H & E Staining.
6. Molecular basis of cancer.
7. Pathology of atherosclerosis.
8. Mechanism of cellular aging.

III. Reasoning Out: **(4 x 5 = 20)**

1. 45 Years old male who is smoker for past 15 years presented with cough and copious sputum expectoration. What are the possible diagnosis? And enumerate in detail about one of the cause.

2. 60 Year old male hypertensive, VDRL positive patient, presented with sudden onset of excruciating pain anterior chest extending to back. Patient expired in casualty. What's the diagnosis? Write in detail about types of the lesion and morphological changes.

3. A 5 Year old boy presented with puffiness of face and massive proteinuria. What's the diagnosis? Write in details about pathological causes involved and discuss about any one of the cause in detail.

4. A 15 year old boy presented with swelling in scrotum. Enumerate the pathological causes of swelling, precursor lesions and morphology of any one of the condition.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Write in briefly about pathogenesis of pulmonary hypertension.
2. Features of partial mole.
3. Morphology of Amyloidosis in spleen.
4. Briefly write about proto oncogenes, oncogenes and oncoprotein.
5. Disorders associated with splenomegly.
6. Write in detail about features of autosomal recessive disorder.
7. Write about Wolman disease.
8. Write about endometrial dating.
9. Briefly write about fibromatosis.
10. Disorders associated with Thyrotoxicosis.

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[LM 113] MAY 2018 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code :202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Discuss in detail the pathogenesis of Obesity and its various systemic complications.

2. Enumerate the disorders associated with Airflow obstruction. Discuss briefly the pathogenesis, morphology and clinical complications of Chronic Obstructive Pulmonary Disease.

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

1. Dystrophin.
2. Crescentic Glomerulonephritis.
3. Androgen Insensitivity Syndrome.
4. Autoimmune Hepatitis.
5. Synovial Biopsy.
6. Nonbacterial Thrombotic Endocarditis.
7. PEComa.
8. Pleomorphic Xanthoastrocytoma.
9. Advanced Glycation Endproducts.
10. Pulmonary Alveolar Proteinosis.

III. Reasoning Out: **(4 x 5 = 20)**

1. 60 year old female had severe nausea, vomiting, early satiety, anaemia and 10 kg weight loss within a period of 3 months. She died due to road traffic accident. On autopsy the stomach appeared small and shrunken and had a "leather bottle" appearance. What would be the diagnosis and histologic picture of the stomach lesion?

2. 20 year old male presented with headache, sweating, tremor, abdominal pain, nausea and vomiting. He had paroxysmal episodes of hypertension, tachycardia and palpitations. Imaging studies revealed an adrenal mass. His urinary excretion of free catecholamines and their metabolites were found to be increased. What would be the diagnosis and histologic picture of the adrenal mass?

3. 40 year old female presented with symmetric muscle weakness affecting the proximal muscles and it was slow in onset. Patient had lilac coloured discolouration of the upper eyelids (heliotrope rash) associated with periorbital edema and scaly erythematous eruption over the knuckles. What is the diagnosis? Describe the pathogenesis and histologic appearance of the involved muscle.

4. 30 year female presented with the complaints of yellow frothy vaginal discharge, vulvovaginal discomfort, dysuria and dyspareunia. On colposcopic examination vaginal and cervical mucosa had a fiery red appearance, with marked dilatation of cervical mucosal vessels – "Strawberry cervix". What is the causative organism? Describe its appearance in conventional Pap smear.

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[LN 113] OCTOBER 2018 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Discuss in detail about Cardiomyopathies. Describe the pathogenesis, morphology and clinical features of Hypertrophic Cardiomyopathy.

2. Enumerate the Major Malabsorption Syndromes. Write about the role of intestinal Biopsy in the diagnosis of Malabsorption Syndromes. Discuss briefly about Celiac Disease.

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

1. Placental site trophoblastic tumor.
2. Lupus Nephritis.
3. Trace elements.
4. Serrated Adenoma.
5. Testicular Biopsy.
6. Solitary Rectal Ulcer Syndrome.
7. Alcoholic Liver disease.
8. Microsatellite instability.
9. Gene therapy.
10. Retinoblastoma.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 65 year old Man was bedridden following surgery. He complained of pain in the calf muscles on squeezing. He suddenly developed breathlessness and died. Discuss the condition which caused the death and the findings to be expected in autopsy.

2. A 46 year old male underwent renal transplantation. After one month, he was admitted with fever, anemia, and oliguria. His serum creatinine was 2.4 mg/100ml. What is the pathogenesis and the morphology of the lesion in this patient?

3. A 21 year old female presented with swelling in front of neck and exophthalmos. Discuss the etiopathogenesis of the lesion and investigations for confirmation of the diagnosis.

4. A 60 year old female presented with pain and swelling in the right knee. X-ray revealed narrowing of joint space and osteophytes. Discuss the pathogenesis of the condition.

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[LO 113] MAY 2019 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Write about the Immune Mechanisms of Glomerular injury. Discuss the classification and Pathogenesis of Crescentic Glomerulonephritis.

2. Write about the Degenerative diseases of the Central Nervous System. Discuss in detail about the pathogenesis and morphology of Alzheimer Disease.

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

1. Hirschprung disease.
2. Fragile chromosomes.
3. Graft versus host reaction.
4. Bio Medical Waste Management.
5. Diabetic microangiopathy.
6. Bone marrow biopsy.
7. Pseudogout.
8. Nerve biopsy.
9. Premalignant conditions in the breast.
10. Krukenberg tumor.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 52 year old female with pain and swelling of small joints of fingers and wrists on both sides with complaints of morning stiffness. What is the probable diagnosis? Discuss the pathology and morphology of the condition with a note on the investigations for confirming the diagnosis.

2. 53 year old male, known hypertensive for 15 years presented with hypotension and was brought in a state of shock. Examination revealed massive intra peritoneal hemorrhage. What is the probable cause? What is the pathogenesis and morphology of this condition?

3. 47 year old male was complaining of chest pain for 30 minutes and was not relieved by rest. What is your diagnosis? What is the pathogenesis and clinical course?

4. 22 year old female presented with headache, photophobia and neck rigidity. CSF examination revealed cloudy appearance under increased pressure with reduced glucose content. Discuss the morphology of this condition.

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[LP 113] OCTOBER 2019 **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Define Inflammatory Bowel Disease. Discuss the pathogenesis and morphology of Crohns disease and Ulcerative colitis. Enumerate the differences between these two entities.

2. Define Vasculitis. Discuss the pathogenesis, morphology and clinical features of different types of Noninfectious vasculitis.

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

1. Prion Diseases.
2. Functions of Vitamin D.
3. Pathology of cerebral Malaria.
4. Pathogenesis of septic shock.
5. Squash cytology.
6. Pseudo AngiomatousStromal Hyperplasia.
7. Infective Endocarditis.
8. Diabetic nephropathy.
9. Bacillary Angiomatosis.
10. Nesidioblastosis.

III. Reasoning Out: **(4 x 5 = 20)**

1. 45 year old male presented with sudden appearance of multiple sharply demarcated pigmented lesions in the trunk. The lesions protruded above the surface of skin and appeared to be stuck to skin and had a greasy surface. On examination the patient was found to have GI malignancy. What would be the diagnosis of the skin lesion? Describe the histopathology of the lesion and its variants.

2. 25 year male presented with recurrent kidney stones, peptic ulcer and marked hypercalcemia. Imaging studies showed diffuse osteopenia, erosion of the tufts of phalanges, subperiosteal cortical resorption of the radial side of the phalanges and a lytic lesion in the rib. Resected rib showed an expansile Brown tumor. What is the diagnosis? Describe the pathogenesis and morphology of the lesion.

3. 20 year old male with prominent mucocutaneous pigmentation presented with multiple small intestinal polyps which on histology showed a Christmas tree appearance. Describe the nature of the polyps, its pathology and complications.

4. 50 year old female presented with dry eyes, dry mouth, dryness of nasal mucosa, epistaxis and enlargement of parotid gland. What is the diagnosis? Describe the pathogenesis and morphology of the involved parotid gland.

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[LQ 113] AUGUST 2020 **Sub. Code: 2010**

(MAY 2020 SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Discuss about the various differential diagnosis of pleomorphic spindle cell sarcomas. Discuss the role of IHC in their diagnosis.
2. Discuss the genetics involved in papillary carcinoma thyroid. Describe the different variants of papillary carcinoma and their prognostic significance.

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

1. Variants of Osteosarcoma and the latest IHC markers.
2. Nesidioblastosis.
3. Gleason's grading.
4. PECOMA.
5. Neuropathology of hypoxia.
6. Role of Immuno-fluorescence in skin biopsy.
7. Current concepts of EIN.
8. Amphicrine carcinoma.
9. Metaplastic lesions of urinary bladder.
10. Piringer – Kuchinka lymphadenitis.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 26 year old female, developed puffiness of face, swelling of both legs with discoid lesions. She was admitted to the medical ICU with fever, anemia (Hb - 9gms%) and decreased platelet count (15,000 cells/cumm). MP - QBC positive, Urine protein - 3+
   a) What is your probable diagnosis?
   b) Discuss the pathology and morphology of this condition
   c) Enumerate the peripheral smear findings
   d) Enumerate all the investigations to diagnose the case.

2. A 35 year old female, IT worker, returned from Italy 10 days back, now complaints of fever and dry cough. ESR: ½ hour – 20mm, 1 hour – 40mm. Hb – 8.5gms%. CBC shows lymphopenia. Nasopharyngeal swab taken and sent to NIV, Pune.
   a) What is your probable diagnosis?
   b) What are the biochemical tests you would like to do with the patient?
   c) What are the hematological tests you would like to do?
   d) Who are the susceptible individuals and what are the organs affected and their morphological changes?

3. A 35 year old male, lorry driver by profession, developed fever, cough and hemoptysis. On examination mantoux was positive, ESR elevated and X-ray chestrevealed large cavitatory lesion.CBC showed WBC count of 1,500 cells/cumm with lymphopenia.
   a) What is your probable diagnosis?
   b) What are the differential diagnosis for cavitatory lesions of lung?
   c) What is the pathogenesis in this patient?
   d) What are the Gastro-intestinal infections this patient can succumb to.

4. A 30 year old female, came with hot flushes and fever. She was admitted in the surgical ICU for acute abdominal pain. Appendicectomy was done and it revealed a lesion at the tip.
   a) What is your probable diagnosis?
   b) What are the other sites which may be involved?
   c) What is the HPE finding? How do you classify?
   d) What are the biochemical findings you expect in this patient?

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[LS 113] **NOVEMBER 2020** Sub. Code: 2010

(OCTOBER 2020 SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Etiopathogenesis and pathology of hypertension discuss hypertensive cerebrovascular disease and systemic hypertensive heart disease

2. Write about endocarditis discuss predisposing factors, potential complications location of active vegetations and pathological criteria

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

1. Pathology of acute lung injury
2. Gliosis
3. Bone marrow trephine biopsy
4. Secondary pulmonary tuberculosis
5. Cyclins
6. Imprint cytology
7. Tertiary syphillis
8. Frozen section
9. Benign lesions of larynx
10. Pulmonary hamartoma

III. Reasoning Out: **(4 x 5 = 20)**

1. 54 year old male with advanced renal cell carcinoma treated with immuno modulators developed dyspnea and low grade fever for two weeks. CT image shows diffuse miliary nodules. Open lung biopsy was taken and HPE showed no evidence of giant cells or granulomas. Discuss about pathology of lung injury.

2. 60 year old male was bedridden following vertebral metastasis from prostatic Adenocarcinoma. He developed sudden breathlessness and calf muscle pain on squeezing. Discuss the findings.

3. 50 year old female with pain and swelling of small joints of fingers and wrist of both sides with complaints of stiffness in the morning. Discuss the pathology and investigations for confirming diagnosis.

4. 43 year old woman had a rapidly growing mass in right gluteal region. Biopsy revealed undiferrentiated sarcoma. Chest x ray showed multiple masses in both lungs, which were being suspected of metastatic lesions. She subsequently developed thrompocytopenia. Discuss.

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[LS 113]

[MD 0721] JULY 2021 **Sub. Code: 2010**

(MAY 2021 SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Write about pathogenesis of sepsis and systemic inflammatory response syndrome. Discuss pathology of organs involved in septic shock. Causes and simulators of SIRS. Role of ihc stains to highlight the effect of cytokines on organs involved.

2. Classify aneurysm, discuss etiopathogenesis , pathology of aortic aneurysm.

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

1. Interstial lung disease.
2. Nonalcoholic fatty liver.
3. Hemolytic uremic syndrome.
4. Myocarditis.
5. Immature platelet fraction.
6. Immunohistochemistry in soft tissue tumors.
7. Tuberculoma.
8. Imprint cytology.
9. Endometrial intraepithelial neoplasia.
10. Neuroendocrine tumors of lung.

III. Reasoning Out: **(4 x 5 = 20)**

1. 15 year old female underwent appendicectomy. On gross examination a bright yellow lesion was seen in the tip of appendix. Discuss pathology of the lesion and staging by applying special stains.

2. 62 year old male who had a worsening cough for several months now has dyspnea. He also has fatigue weight loss chest x ray shows hilar lymphadenopathy .

3. 60 year old male hypertensive, VDRL positive patient, presented with sudden onset of excruciating pain anterior chest extending to back. Patient expired in casualty.
   a) What is the most likely clinical diagnosis?
   b) Mention the key mechanism of its pathogenesis?
   c) Enlist the other associated pathological features with this disease.

4. 7 year old male presents with a rapidly enlarging mass that involves his mandible. Biopsy was taken. Discuss etiopatogenesis morphology and immunophenotyping.

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[MD 0721]

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

[MD 1121] NOVEMBER 2021 **Sub. Code: 2010**

(OCTOBER 2021 SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Classify lung tumours. Discuss about aetiopathogenesis, morphology, histological appearance and role of immunohistochemistry in tumour categorization.

2. Classify jaundice – Discuss the role of liver biopsy in the diagnosis of the various types of jaundice.

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

1. Quality control in cytology.
2. Viral inclusions.
3. Role of PCR in diagnostic laboratory.
4. Cardiac myxoma.
5. Ulcerative lesions of GIT.
6. Fibrolamellar carcinoma.
7. Renal lesions in SLE.
8. Malakoplakia.
9. Granulomatous Prostatitis.
10. Aneursyms in brain.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 4 year old male child presents with anorexia, loss of weight, failure to thrive and frequent passage of bulky frothy stool with abdominal distension and indigestion for more than a year
    a) What can be the possible causes?
    b) Give an outline for confirmation of your diagnosis.

2. A 63 year old male presented with left supraclavicular hard lymph node, noted two weeks back. O/E: Hard non tender left testicular swelling present
    a) What is your provisional diagnosis?
    b) Enumerate the different histological variants.
    c) How will you confirm your diagnosis?

3. A 7 year old girl presented with a discharging sinus over right ankle joint for 2 weeks. There is an accompanying history of high fever with chills. O/E: Tendereness seen over lower part of tibia.
    a) What is your provisional diagnosis?
    b) Write the aetiopathogenesis.
    c) How will you confirm your diagnosis?

4. A 9 year old girl from an urban slum seeks medical attention for fever with pain and swelling of both knee and right wrist joint affected one after another for last 7 days
    a) What is your provisional diagnosis?
    b) What are the other possibilities?
    c) How will you investigate the case?

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[MD 1121]

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

[MD 0522] **MAY 2022** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Discuss the bone diseases caused by osteoclast dysfunction and abnormal mineral homeostasis.
2. Give an account of tumours of prostate. Describe the markers for metastatic prostate cancer. Add a note on methods to detect these markers.

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

1. Cystic diseases of breast.
2. Solitary nodule thyroid.
3. Pigmented tumours of skin.
4. Merkel cell tumour.
5. Dystrophin.
6. Barrets oesophagus.
7. Floppy wall syndrome.
8. Significance of squamous atypia in pap smear.
9. Microalbuminuria.
10. SARS pathology.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 78 year old man presents with rapidly growing purpuric and nodular cutaneous lesion on the left forehead. Skin biopsy was performed. IHC showed positivity for CD31, CD34, KI67 immunostain showed high proliferative activity throughout the tumour.
    a) What is the most probable diagnosis?
    b) What are the histological findings?
    c) Discuss the differential diagnosis.

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2. A 45 year old female complained of difficulty in swallowing with weakness of upper limb muscles. CT showed mass in anterior mediastinum.
    a) What is the diagnosis?
    b) What is the morphological classification based on WHO?
    c) What are the prognostic parameters?
    d) What are the associated syndrome and autoimmune diseases?

3. A 39 year male smoker with hypertension suddenly develops severe left sided chest pain with extension to left arm, respiratory distress and syncopal attack.
    a) What are the probabilities?
    b) What are the morphological and biochemical changes for the underlying disorder?

4. A 59 year old male working in sandblasting gradually shortness of breath with chronic cough. Chest x-ray showed fine nodular shadows in the upper part of both lungs.
    a) What are the possible causes?
    b) How can you confirm your diagnosis?

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[MD 0522]

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

[MD 1022] **OCTOBER 2022** **Sub. Code: 2010**

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Enumerate Cystic Diseases of Kidney. Describe in detail about Autosomal Dominant Polycystic Kidney Diseases.
2. AJCC Classification, AJCC Staging system of Colorectal Carcinoma. Epidemiology, Pathogenesis, Morphology of Colonic cancers.

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

1. Placental-Site Trophoblastic Tumors.
2. Proliferative Breast Lesions.
3. Describe in detail about acute respiratory distress syndrome.
4. Muscle biopsy with special stains.
5. Causes and consequences of Portal hypertension.
6. Write in detail about mediators of glomerular injury.
7. Surfactant Dysfunction Disorders.
8. Pathogenesis, Morphology and Clinical features of Auto Immune Gastritis.
9. Make a brief note of Precursor lesions of HCC and Cholangiocarcinoma.
10. Role of Immunofluorescence in skin biopsy.

III. Reasoning Out: **(4 x 5 = 20)**

1. A 7 Years old child presented with Hepatosplenomegaly, anemia and leucopenia. On examination, his bone marrow revealed large cells with cytoplasm having crumpled appearance.
    a) Name the disease and diagnostic cell.
    b) Mention pattern of heritance.
    c) Describe biochemical basis of lesions.
    d) Morphological features and diagnosis of lesion.

2. A 12 Year old boy presented with swelling thigh and history of pain for 2months.
    a) What is the possible diagnosis?
    b) X-ray findings and genetic rearrangements.
    c) Write in detail about microscopic findings and IHC markers for the same.

3. A 50 Year old female presented with swelling of parotid region, dry eyes and mouth.
    a) What is the probable diagnosis?
    b) Etiopathogenesis of the disease.
    c) Associated malignant lesion.

4. A 45 Year old lady presented with swelling in front of neck with elevated TSH values.
    a) What is the probable diagnosis?
    b) Pathogenesis of the disease.
    c) Morphology of the lesion.
    d) Other lesions of similar pathology.

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[MD 1022]

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

[MD 0723] **JULY 2023** **Sub. Code: 2010**

(MAY 2023 EXAM SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Discuss the pathogenesis, morphology and clinical features of Cystic Fibrosis. Add a note on the Genetic aspects of the disease and its modifiers.
2. Give an account of Tumors of Endometrium, its precursor lesions and the genetic profile of Endometrial Cancers.

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

1. Cerebral Malaria.
2. Kawasaki disease.
3. Hypertrophic Cardiomyopathy.
4. Pneumonia in Immunocompromised Host.
5. Mucinous Neoplasms of Appendix.
6. Pneumoconiosis.
7. Solitary Nodule of Liver.
8. Buerger's disease.
9. Crystal induced arthropathies.
10. Myasthenia Gravis.

III. Reasoning Out: **(4 x 5 = 20)**

1. 35 yrs /M presented with tender red nodules on the face with widespread erythematous nodules and vesicles, patient also had fever, malaise, arthralgia and gives H/o treatment for the nodules, one month before.

   a) What is your diagnosis?
   b) What is the pathogenesis of the above condition?
   c) What are the differential diagnosis?

2. 4 yrs / M Child presented with renal mass, macroglossia, hemihypertrophy, omphalocele.

   a) What is your diagnosis?
   b) What is genetic abnormality?
   c) If the resected organ also shows an expansible lesion adjacent to primary lesion What is it due to and what is the significance of identifying it?

3. 35 yrs / F developed puffiness of face, oliguria. She was treated for Skin rashes and joint pains for the past 8 years.

   a) What is your diagnosis?
   b) What is the cause of Oliguria?
   c) What are the salient findings expected in renal biopsy?

4. 55 yrs / M presented with exophytic warty growth on penile shaft.

   a) What is your diagnosis?
   b) What are the pathogenic pathway involved?
   c) What are the differential diagnosis of warty lesions of Penis?
   d) Enumerate the premalignant conditions of Penis.

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[MD 0723]

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

[MD 1223] **DECEMBER 2023** **Sub. Code: 2010**

(OCTOBER 2023 EXAM SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER I – GENERAL MEDICAL AND SURGICAL PATHOLOGY INCLUDING APPLIED ASPECTS IN PATHOLOGY

Q.P. Code: 202010

Time : Three Hours **Maximum : 100 Marks**

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

1. Describe the causes of Hypercoagulable states and discuss the pathogenesis, morphology, clinical features and diagnosis of Antiphospholipid Antibody Syndrome.
2. Discuss about the Neoplastic lesions of Pancreas, add a note on precursor lesions of Pancreatic Carcinoma.

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

1. Diabetic Nephropathy.
2. Coeliac disease.
3. Pulmonary manifestations in an Immunocompromised Host.
4. Hereditary non polyposis colorectal cancer.
5. Inflammatory Myopathies.
6. Zygomycosis.
7. Cervical Cancer Screening.
8. Benign Epithelial Lesions of Breast.
9. Metabolic Syndrome.
10. Para Testicular Lesions.

III. Reasoning Out: **(4 x 5 = 20)**

1. 55 /M working in sand blasting industry presented with shortness of breath and imaging revealed fine nodularity in the upper zone of Lung.

   a) What is your diagnosis?
   b) What are the differential diagnosis for Upper Lobe Nodularity?
   c) What is the pathogenesis of the lesion?
   d) What are the complications?

2. 65 / M was diagnosed to have PSA level of 100 ng / mL. TRUS revealed a mass lesion in the prostate.

   a) What is the role of PSA in diagnosis of Prostatic malignancies?
   b) What are the other conditions causing elevated PSA?
   c) What is the role of IHC in prostatic biopsy?

3. 78 / M who had H/o Diarrhoea for a week, later presented with Hematuria, Malaena and neurological deficit. Hb was 6 g / dL and Platelet count 62000 / cu mm.

   a) What is your diagnosis?
   b) What is the etiology of this condition?
   c) What is the pathogenesis?
   d) What is the prognosis?

4. 38 / F presented with diffuse thyroid enlargement, coarse dry skin over the shin and prominent eye balls. She was found to have Right adnexal cystic mass also. Imaging of neck was normal. Her TSH level was 0.2 IU.

   a) What is your diagnosis?
   b) What is the pathogenesis?
   c) What will be the morphology of Pelvic mass?
   d) What is the behaviour of the Pelvic mass?

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[MD 1223]