

April-2001

[KD 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

Branch III — Pathology

(Common to OR/NR/Revised Regulations)

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the recent concepts, classify and give pathology of Non-Hodgkins lymphoma. (25)
2. Discuss the pathology of ulcerative lesions in Ileum and Colon. (25)
3. Write briefly on (5 × 10 = 50)
 - (a) Immunological mechanism of glomerular injury.
 - (b) Congenital heart diseases
 - (c) Malignant lesions of lung
 - (d) Computer in Pathology
 - (e) Paraneoplastic syndrome

November-2001

[KE 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Common to New/Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the molecular pathology of small round cell tumours. (25)
2. Classify eccrine sweat gland tumours and discuss their pathology. (25)
- 3 Write briefly on : (5 × 10 = 50)
 - (a) Metabolic bone disease.
 - (b) Obesity and other systemic disorders.
 - (c) Pathology of male infertility.
 - (d) Congenital cystic lesions of the kidney.
 - (e) Ependymoma.

[KG 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Common to OR/NR/Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the current concepts in rheumatic heart disease. (25)
 2. Discuss the Pathology of PRION. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Osteogenic sarcoma.
 - (b) Mesothelioma.
 - (c) Parathyroid adenoma.
 - (d) Sclerosing cholangitis.
 - (e) Clear cell tumour of Cervix.
-

September-2002

[KH 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Discuss the pathology of Gestational trophoblastic tumors. (25)
2. Discuss the role of electron microscopy in the study of renal diseases. (25)
3. Write briefly on : (5 × 10 = 50)
 - (a) Prognostic factors in Ovarian cancer
 - (b) Large cell lymphomas
 - (c) Merkel cell carcinoma
 - (d) Alpha - 1 - antitrypsin deficiency
 - (e) Hepatitis C.

April-2003

[KI 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Classify CNS tumours. Discuss briefly morphology and microscopy of Glial Neoplasms. (25)
 2. Discuss the aetiology, pathology, types, complications of the vegetations of the heart. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Hamman-Rich Syndrome
 - (b) HIV related lymphadenopathy
 - (c) Polyps of the colon
 - (d) Carcinoid tumours
 - (e) Small round cell tumours.
-

[KJ 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks
M.C.Q. : 20 marks

M.C.Q. : Twenty minutes

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 pathogenesis and molecular biology of colorectal carcinoma. Add a note on the morphology and prognostic action of colorectal cancer. (15)

2. Define and classify glomerulonephritis. Discuss in general the mechanisms involved in Aetiopathogenesis of Acute Glomerulonephritis. (15)

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

(a) Classification and differentiation of carcinoid tumour of Gastro-intestinal tract.

(b) Pathobiology of Hirschsprung's disease.

(c) Classification and pathogenesis of Sjogren's syndrome.

(d) Teratoma.

(e) Aetiopathogenesis of carcinoma cervix.

(f) Signet ring cell lymphoma.

(g) Hormone producing Tumours of Ovary.

(h) Insitu Hybridisation—Its utility as Diagnostic Tool.

(i) Bone marrow transplantation.

(j) Classification of Osteosarcoma.

[KK 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

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) Classify vasculitis. Discuss the aetiology and pathogenesis in brief. (15)

(2) Discuss the aetiology and pathology of Malabsorption syndromes. (15)

B. Short notes on :

(10 × 5 = 50)

(1) Miliary Tuberculosis.

(2) Paraganglioma.

(3) Esophagitis.

(4) Portal Hypertension.

(5) Focal segmental glomerulosclerosis.

(6) Malignant Melanoma.

(7) Gout.

(8) Peripheral Nerve Sheath Tumor.

(9) Pheochromocytoma.

(10) Sex-cord-stromal tumors.

[KL 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

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 pathogenesis and pathology of primary cardiomyopathy.

(2) Discuss the diagnostic value of liver biopsy.

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

(a) Fibroepithelial lesions of breast.

(b) Extranodal lymphomas.

(c) Sex cord stromal tumours of ovary.

(d) Interstitial pneumonitis.

(e) Primitive neuroectodermal tumours.

(f) Muscle biopsy.

(g) Nonbacterial Thrombotic Endocarditis.

(h) Giant cell lesions of Bone.

(i) Immunofluorescence in the diagnosis of skin disorders.

(j) Mediastinal tumours.

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

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) Classify glomerular diseases. Discuss etiopathogenesis and pathology of nephrotic syndrome.

(2) Discuss etiopathogenesis of lung tumors
classify and discuss lung tumors.

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

(a) Lamellar carcinoma of liver.

(b) Chordoma.

(c) Pathology and complications of myocardial infarction.

(d) Pekomas.

(e) Tumor-like lesions of bone

(f) PIN.

(g) Pre-malignant lesions of breast.

(h) Trophoblastic tumors.

(i) MEN.

(j) Types of pemphigus lesions.

[KO 115]

Sub. Code : 2012

M.D.DEGREE EXAMINATION.

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

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 etiopathogenesis and morphology of colorectal carcinoma.

2. Discuss the classification of primary muscle diseases and the role of muscle biopsy in their diagnosis.

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

(a) Role of Immunofluorescence in Acute glomerulonephritis

(b) Non-alcoholic fatty liver disease

(c) Malignant Peripheral Nerve Sheath Tumours (MPNST)

(d) Role of Immunohistochemistry in Round cell sarcomas

(e) Metaplastic carcinoma of Breast

(f) Borderline tumours of ovary

(g) Neuroendocrine tumours of lung

(h) Marginal Zone Lymphoma

(i) Bacillary Angiomatosis

(j) Follicular neoplasm of thyroid.

[KP 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

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

Answer ALL questions.

Draw suitable diagrams wherever necessary.

1. Essay questions :

(1) Etiopathogenesis of myocardial infarction.
Describe the gross and histopathological changes write
in detail the various diagnostic tests used for diagnosis
and prognosis. (20)

(2) Discuss the classification and pathology of
tumours of odontogenic epithelium. (15)

(3) Discuss the pathology of lymphomas at
unusual sites. (15)

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

(a) Pathogenesis and pathology of
Hirschsprung's disease.

(b) Gastro intestinal Stromal Tumours.

(c) Prostatic Intraepithelial Neoplasia.

(d) Muscular dystrophies.

(e) Haemochromatosis.

(f) Adult polycystic kidney disease.

[KQ 113]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

Branch III — Pathology

SYSTEMIC PATHOLOGY

Common to

Paper III – (Old/New/Revised Regulations)

(Candidates admitted from 1988-89 onwards)

and

**Paper III – (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) Classify tumours of the lung and discuss the etiopathogenesis and pathology of bronchogenic carcinoma. (20)

(2) Drug induced changes in female genital tract. (15)

(3) Define nephrotic syndrome and discuss the pathology of membranoproliferative glomerulonephritis. (15)

II. Write short notes on :

(6 × 5 = 30)

(a) Prognostic markers in breast cancer.

(b) Duchenne muscular dystrophy.

(c) Rosai-Dorfman disease.

(d) Discuss hydatidiform mole.

(e) Metaplastic lesions in endometrium and cervix.

(f) Creutzfeldt-jakob disease.

[**KR 115**]**Sub. Code : 2012**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Common to — (Old/New/Revised Regulations)

(Candidates admitted upto 2003-04)

and

(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 morphology, differential diagnosis and Immunohistochemistry of gastro intestinal stromal tumours (GIST). (20)

(2) Discuss the morphology and problems in diagnosis of follicular neoplasms of thyroid. (15)

(3) Classify cutaneous lymphoproliferative diseases and discuss their diagnosis and differential diagnosis. (15)

II. Write Short notes on :

(6 × 5 = 30)

(a) Neoplasms of heart.

(b) Significance of endometrial epithelial dysplasias.

(c) Pulmonary alveolar proteinosis.

(d) Role of endoscopic biopsies in malabsorption syndromes.

(e) Ig A nephropathy.

(f) Premalignant lesions of breast.

MARCH 2008

[KS 115]

Sub. Code : 2012

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper III — SYSTEMIC PATHOLOGY

Common to all candidates

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Essay questions: (2 × 20 = 40)
1. Discuss the morphology, pathogenesis and molecular genetics of Alzheimer's disease.
 2. Discuss the risk factors, pathogenesis and prognostic factors of breast carcinoma.
- II. Write short notes on : (10 × 6 = 60)
1. Psoriasis.
 2. Pheochromocytoma.
 3. Cholelithiasis.
 4. Cervical intra epithelial neoplasia.
 5. Lipoid nephrosis.
 6. Hypertrophic gastropathy.
 7. Renal cysts.
 8. Intestinal polyps.
 9. Angio immunoblastic lymphadenopathy.
 10. Biliary cirrhosis.
-

September 2008

[KT 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

Branch III – Pathology

Paper III - SYSTEMIC PATHOLOGY

Common to all Regulations

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Classify aneurysms. Discuss the etiopathogenesis of aortic aneurysm and complications.
2. Classify ovarian tumours. Discuss the etiopathogenesis and morphology of sex cord stromal tumors.

II. Write short notes on :

(10 X 6 = 60)

1. Phyllodes tumor.
 2. Medullary carcinoma of thyroid.
 3. Angioimmunoblastic lymphadenopathy.
 4. Felty syndrome.
 5. Diabetic nephropathy.
 6. Haemolytic-uraemic syndrome.
 7. Crohn's disease.
 8. Peyronie's disease.
 9. Haemochromatosis.
 10. Asbestosis.
-

March 2009

[KU 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper III – SYSTEMIC PATHOLOGY

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Discuss classification and pathogenesis of glomerular diseases.
2. Describe the current concepts in the pathogenesis of atherosclerosis.

II. Write short notes on :

(10 x 6 = 60)

1. Pathogenesis of metabolic bone disease.
2. Diabetic nephropathy.
3. Describe autoimmune thyroid disorders.
4. Endomyocardial biopsy.
5. Idiopathic pulmonary fibrosis.
6. Chondrosarcoma variants.
7. M.E.N. syndromes.
8. FIGO staging of ovarian tumors.
9. Immunological changes in leprosy.
10. Tumors of orbit.

September 2009

[KV 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper III – SYSTEMIC PATHOLOGY

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Classify Brochogenic carcinoma. Discuss its etiopathogenesis, morphology, diagnosis and complications.
2. Classify germ cell tumors. Discuss their etiopathology, clinical features, morphology and prognosis.

II. Write short notes on :

(10 x 6 = 60)

1. Ductal carcinoma insitu
2. Cholelithiasis
3. Prostatic intra-epithelial neoplasia
4. Chondroblastoma
5. Types of ependymoma
6. Hepatitis C viral infection
7. Embryonal sarcoma
8. Collagenous colitis
9. Erythema nodosum
10. Nesidioblastosis

March 2010

[KW 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

Branch III – PATHOLOGY

(Common to all candidates)

Paper III – SYSTEMIC PATHOLOGY

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Discuss importance of immunohistochemistry and other markers in soft tissue sarcomas.
2. Classify cirrhosis of liver and describe the etiopathogenesis of alcoholic cirrhosis.

II. Write short notes on :

(10 x 6 = 60)

1. Metabolic bone diseases.
2. Interstitial nephritis.
3. Gastrinomas.
4. Endomyocardial biopsy.
5. Placental pathology in hypertensive diseases of pregnancy.
6. Immunology of diabetes mellitus.
7. Hormone producing ovarian tumors.
8. Tumors of odontogenic epithelium.
9. Para neoplastic syndromes.
10. Pathology of target organ damage in hypertension.

September 2010

[KX 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

Branch III – Pathology

Paper III - SYSTEMIC PATHOLOGY

(Common to all candidates)

Q.P. Code : 202012

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Discuss the etiopathogenesis, clinical features, morphology and prognosis of Carcinoma of Prostate.
2. Discuss the current concepts in the pathogenesis of Atherosclerosis.

II. Write short notes on :

(10 X 6 = 60)

1. Premalignant conditions of breast.
2. Paediatric solid tumours.
3. Interstitial nephritis.
4. Value of endometrial biopsy in diagnosis of abnormal uterine bleeding.
5. Interpretation of Endomyocardial biopsies.
6. Pathology of Neuroendocrine lung tumours.
7. Hepatitis C viral infection.
8. Pathology of Malignant melanoma.
9. Para testicular tumours.
10. Cystic disease of kidney.

MAY 2011

[KY 115]

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
SYSTEMIC PATHOLOGY**

Q.P. Code : 202012

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Classify Carcinoma breast. Describe molecular pathology and histologic grading with prognostic factors in breast carcinoma.	6	15	10
2. Enlist epithelioid soft tissue tumors. Discuss the site, Morphology, approach to diagnosis and prognostic factors in CK+ve, CD34+ epithelioid sarcomas.	6	15	10
II. Short Questions:			
1. Current concept in Atherogenesis.	3	8	5
2. Cystic diseases of kidney.	3	8	5
3. Mucin histochemistry in Gastro intestinal lesions.	3	8	5
4. Muscle biopsy – Indications, Fixation, staining and enzyme histochemical methods for muscle biopsies.	3	8	5
5. Immune-mediated neuropathies.	3	8	5
6. Giant cell lesions of the bone.	3	8	5
7. Describe various dissection techniques of heart and discuss clinico pathologic autopsy findings in valvular disease of heart.	3	8	5
8. Testicular biopsy interpretation in male infertility.	3	8	5
III. Reasoning Out:			
1. 50 year old male, building construction worker, for 20 years recently experiencing increasing dyspnea, provoked on exertion, accompanied by productive cough. X-ray chest revealed irregular linear densities in both lower lobes with honey comb effect. a) What is your diagnosis? b) Describe the pathogenesis. c) Mention other complications of the etiological agent. d) Methods of demonstrating the causative agent.	4	10	5
2. 50 year old severely anemic male with H/o intermittent occult blood in stools. O/E No palpable mass abdomen with active bowel sounds. Radiographically normal but angiogram revealed 2 cm focus of dilated tortuous vascular channels in mucosa and submucosa of the caecum			

(PTO)

	Pages (Max.)	Time (Max.)	Marks (Max.)
a) What is the possible diagnosis? b) Explain the pathology. c) Enumerate the complications.	4	10	5
3. 68 year old female c/o severe weight loss in the recent past and progressive jaundice with vague constant epigastric pain with discomfort and diarrhoea and treated for episodes of migrating thrombosis. Serum bilirubin 14 mg/dl with direct 10 mg/dl a) What is the possible diagnosis? b) Mention the precursor lesions. c) Describe the pathogenesis, morphology and prognosis of the lesion.	4	10	5
4. 28 year old primi developed vaginal bleeding in her II trimester. Her BP was 160/100. O/E uterus was large for dates. Ultra sound: revealed “snow storm” intra uterine content without fetus. D & C done and the cytogenetic analysis revealed only paternal chromosome pattern. a) What is your diagnosis? b) Classify the disease. c) Explain the gross and microscopic grading and scoring. d) Mention the follow up study.	4	10	5

IV. Very Short Answers :

1. Bethesda system.	1	4	2
2. Leukoplakia.	1	4	2
3. “Rule of 10” – mention the lesion and discuss briefly.	1	4	2
4. Define and classify Cirrhosis liver.	1	4	2
5. What is Pseudo Laminar Necrosis?	1	4	2
6. Microalbuminuria.	1	4	2
7. ‘Bone metastatising’ childhood renal neoplasm.	1	4	2
8. Micro invasive carcinoma cervix.	1	4	2
9. Harthle cell – mention the lesions at various sites and organs.	1	4	2
10. Esthesioneuroblastoma.	1	4	2

October 2011

[KZ 115]

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

SYSTEMIC PATHOLOGY

Q.P. Code : 202012

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Essay :

Pages (Max.)	Time (Max.)	Marks (Max.)
-------------------------	------------------------	-------------------------

- | | | | |
|---|---|----|----|
| 1. Discuss the role of immunohistochemistry in CNS neoplasms. | 6 | 15 | 10 |
| 2. Discuss in detail cystic lesions of liver. | 6 | 15 | 10 |

II. Short Questions:

- | | | | |
|--------------------------------------|---|---|---|
| 1. Endo myocardial biopsy. | 3 | 8 | 5 |
| 2. ANCA. | 3 | 8 | 5 |
| 3. Endometrial hyperplasia. | 3 | 8 | 5 |
| 4. Micro papillary carcinoma breast. | 3 | 8 | 5 |
| 5. Edema ovary. | 3 | 8 | 5 |
| 6. Para testicular tumours. | 3 | 8 | 5 |
| 7. LCIS. | 3 | 8 | 5 |
| 8. Protein - C. | 3 | 8 | 5 |

III. Reasoning Out:

- | | | | |
|---|---|----|---|
| 1. Pheochromocytoma
a) Patients may exhibit postural hypotension.
b) Glycosuria maybe demonstrated in one third of patients during acute episode. | 4 | 10 | 5 |
| 2. Hyperuricuria is associated with
a) Diuretics.
b) Pre-eclampsia.
c) Crohn disease. | 4 | 10 | 5 |

(PTO)

	Pages (Max.)	Time (Max.)	Marks (Max.)
3. Regarding Amyloidosis			
a) Bronchiectasis may lead to AL amyloid deposition.			
b) AA-Amyloid usually presents with proteinuria.	4	10	5
4. Diabetic nephropathy.			
a) Initially leads to a decrease in GFR.			
b) Micro albuminuria is often a late finding.	4	10	5

IV. Very Short Answers :

1. Morphology of amoebic liver abscess.	1	4	2
2. CSF – in pyogenic meningitis.	1	4	2
3. Two causes of granular contracted kidneys.	1	4	2
4. Common clinical features of carcinoid syndrome.	1	4	2
5. Baretts esophagus.	1	4	2
6. Neutral mucin.	1	4	2
7. Pleomorphic Lipoma.	1	4	2
8. Homer – wright rosettes.	1	4	2
9. Negri bodies.	1	4	2
10. Atheroma.	1	4	2

April 2012

[LA 115]

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
SYSTEMIC PATHOLOGY
Q.P. Code : 202012**

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Define pyelonephritis. Classify and discuss its Etiopathogenesis and describe the gross and microscopic Pathology. Add a note on its complications.	9	15	10
2. Describe endometrial histology in the menstrual cycle.	9	15	10
II. Short Questions:			
1. Discuss etiopathogenesis of bronchiectasis.	3	8	5
2. Give a diagrammatic depiction of the pathogenesis and Morphology of jejunal mucosa in celiac disease.	3	8	5
3. What is the Goodpasture's syndrome? Discuss urine abnormalities, serologic markers & findings on renal biopsy in Goodpasture's syndrome.	3	8	5
4. What is Addison disease?	3	8	5
5. Describe pathogenesis and pathology of Lichen Planus.	3	8	5
6. Define MEN Syndrome. Classify MEN syndromes and Discuss briefly about their etiopathogenesis and pathology.	3	8	5
7. Discuss the various effects of primary hyperparathyroidism.	3	8	5
8. Write briefly about the pathogenesis of renal calculi.	3	8	5
III. Reasoning Out:			
1. A 42 year old man with history of alcohol abuse has a distended abdomen and dependent pitting edema. He had a Vascular lesion on his face with a spider appearance. Which additional physical finding in this patient would have the same pathogenesis as the skin lesion? a) Ascites b) Caput medusa c) Gynaecomastia d) Oesophageal varices	5	10	5
2. A 70 year old man presented with persistent low grade fever of 2 months duration. He was on treatment for hypertension for the past 2 years. CBC revealed HB 18gm / dl, Total Count 56000 / cu mm., neutrophils with marked shift to the left, Urine sediment showed episodic haematuria. The procedure for confirmation of the most likely diagnosis would be: a) Chest X ray			

(PTO)

April 2012

- | | |
|--|------------------------------|
| <ul style="list-style-type: none"> b) MRI of the abdomen c) Echocardiogram d) Electro encephalogram | 5 10 5 |
| <p>3. A needle biopsy of an abdominal mass in a 2 year old male child showed small round primitive appearing cells with dark Nuclei, scant cytoplasm and poorly defined cell borders arranged in solid sheets. The background showed eosinophilic faintly fibrillar material. A diagnostic feature to look for would be :</p> <ul style="list-style-type: none"> a) Formation of abortive tubules or glomeruli b) Pseudorosettes c) Alternating hyper and hypocellular areas d) Clear PAS+ cytoplasm | |
| <ul style="list-style-type: none"> a) BRCA1 suppressor gene b) MYC proto-oncogene c) RAS proto-oncogene d) RB suppressor gene | 5 10 5 |

IV. Very Short Answers:

- | | |
|---|-----------------------------|
| 1. Enumerate the Kidney biopsy findings in Minimal change disease. | 1 4 2 |
| 2. What are the pulmonary diseases induced by drugs? | 1 4 2 |
| 3. What is the role of ER & PR receptors testing as markers in breast carcinoma? | 1 4 2 |
| 4. Name the liver enzymes whose activities reflect a: Cholestasis b: liver cell damage. | 1 4 2 |
| 5. List causes of hepatic granulomas. | 1 4 2 |
| 6. What is the Histologic Differential diagnosis for GIST. | 1 4 2 |
| 7. List the tests useful in the diagnosis of exocrine pancreatic Disease. | 1 4 2 |
| 8. What is nephrotic range proteinuria? | 1 4 2 |
| 9. Juvenile rectal polyp. | 1 4 2 |
| 10. What is congenital lobar emphysema? | 1 4 2 |

[LB 115]

OCTOBER 2012
M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
SYSTEMIC PATHOLOGY
Q.P. Code : 202012

Sub. Code: 2012

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. What is Hashimoto thyroiditis? Describe pathogenesis and morphology of Hashimoto Thyroiditis. Add a note on its clinical course.	9	15	10
2. Tabulate WHO Classification of Ovarian neoplasms. Describe the gross and microscopic features of Germ Cell Tumours of Ovary.	9	15	10
II. Short Questions:			
1. How are glomerular diseases classified?	3	8	5
2. Enumerate lesions of the Gestational trophoblast.	3	8	5
3. Enumerate the ultrastructural features of GIST.	3	8	5
4. Discuss metastatic tumours to the bone.	3	8	5
5. Write briefly about Zollinger Ellison syndrome.	3	8	5
6. What is follicular variant of papillary carcinoma of the thyroid? Describe its distinctive features & compare them with the conventional Papillary carcinoma.	3	8	5
7. What are the predisposing factors to Malignant melanoma of the skin.	3	8	5
8. Write briefly about Xanthogranulomatous pyelonephritis.	3	8	5
III. Reasoning Out:			
1. A 16 year old boy presented with an oval 8 cm erythematous Scaly lesion over the lower part of the back of his upper arm. The lesion was irregular in shape with indurated elevated Hyperpigmented margin and depressed pale centre. The lesion lacked sensation. The pathognomonic microscopic feature would be a) Hyperkeratosis and acanthosis b) Perineuronal granulomas with nerve destruction c) Leukocytoclastic vasculitis d) Pautrier's microabscess	5	10	5
2. A 25 year old male working in battery making unit presented with Intermittent headache and occasional colicky abdominal pain. The peripheral smear showed hypochromic microcytic anemia with a few polychromatophilic cells. The diagnostic feature to look for in the peripheral smear would be the presence of			(PTO)

- | | | | |
|------------------------|---|----|---|
| a) Target cells | | | |
| b) Punctate basophilia | | | |
| c) Sickle cells | | | |
| d) Schistocytes | 5 | 10 | 5 |
3. A 40 year old man with complaints of fever and fainting spells over the past 6 months states that he faints only on standing. He also complained of pain in the left upper quadrant aggravated by inspiration and pain in the right flank. Blood pressure was normal both when lying down and sitting up. A late diastolic murmur was heard on auscultation. Spleen was enlarged and tender with a friction rub. Urine was positive for blood and the sediment positive for RBCs. Which of the following is the most likely diagnosis?
- | | | | |
|--------------------------------|---|----|---|
| a) Calcific aortic stenosis | | | |
| b) Hypertrophic cardiomyopathy | | | |
| c) Left atrial myxoma | | | |
| d) Pericardial effusion | 5 | 10 | 5 |
4. A 30 year old female presented with fever and pain in the right shoulder. O/E a malar rash was present. CBC showed a mild normocytic Anemia. Urine examination showed trace proteinuria. A positive antiphospholipid antibody test was also present. The fundamental defect in this disease is thought to be failure of the mechanisms that maintain self tolerance.
- | | | | |
|----------|---|----|---|
| a) True | | | |
| b) False | 5 | 10 | 5 |

IV. Very Short Answers :

- | | | | |
|--|---|---|---|
| 1. Classify Gastric Epithelial Dysplasia. | 1 | 4 | 2 |
| 2. What is the general routine for gross examination of the Placenta? | 1 | 4 | 2 |
| 3. What are the criteria for diagnosing malignancy in follicular neoplasms of the thyroid? | 1 | 4 | 2 |
| 4. Name morphological patterns identified under scanning magnification in cutaneous pseudolymphoma. | 1 | 4 | 2 |
| 5. Enumerate the Direct & Indirect mechanisms that lead to CD4+ T cell dysfunction & depletion in HIV infection. | 1 | 4 | 2 |
| 6. What are "Sulfur" granules? | 1 | 4 | 2 |
| 7. Define autoimmune hepatitis. | 1 | 4 | 2 |
| 8. What is the nephritic type "active" urine sediment? | 1 | 4 | 2 |
| 9. Diagnosis of Candida esophagitis. | 1 | 4 | 2 |
| 10. What is Reyes Syndrome? | 1 | 4 | 2 |

(LC 115)

APRIL 2013

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
SYSTEMIC PATHOLOGY
Q.P. Code : 202012**

Time: Three Hours

Maximum: 100 marks

I. Essay: (2X10=20)

1. Define Inflammatory Bowel Disease. Discuss pathogenesis and pathology of Crohns Disease and Ulcerative Colitis highlighting the differences between the two conditions.
2. Discuss etiopathogenesis, precancerous lesions, gross and microscopic pathology of cervical carcinoma.

II. Short Questions: (8X5=40)

1. What are the classic pathological features of ischemic and nephrotoxic Acute Renal Failure?
2. Discuss immunopathogenesis of Rheumatoid Arthritis.
3. Write briefly about Ewing Sarcoma family of tumours.
4. Discuss the pathogenesis of Emphysema .
5. Discuss the heterogeneity of the histology in pleomorphic adenoma of the salivary gland.
6. Describe the gross and microscopic appearance of classic Peptic ulcers.
7. Tabulate the Histologic Activity Index in Chronic hepatitis.
8. Write briefly on polycystic ovarian syndrome.

III. Reasoning Out: (4X5=20)

1. 8 years male child had a sudden onset periumbilical pain with vomiting and low grade fever. His TWBC count was 15000 cells / cu.mm with neutrophilia of 75 %. The diagnostic feature in the resected appendix would be
 - a) Hyperplastic lymphoid follicles
 - b) Presence of E. vermicularis in the lumen.
 - c) Neutrophilic infiltration of the muscularis propria
 - d) Eosinophilic exudates in the lumen
2. A 46 year old Female presented with dysfunctional uterine bleeding and painful nodularity of both breasts. A 10/8/6 cm right sided pelvic mass was detected. A hysterectomy with bilateral salpingo oophorectomy was performed. The resected specimen showed a right ovarian mass with an intact capsule which on cut section was yellowish, with solid and cystic areas. The presence of which microscopic feature would characterize this tumour?
 - a) Schiller Duvall bodies
 - b) Call Exner bodies
 - c) Psammoma bodies
 - d) Hyaline bodies

(PTO)

3. 8 years old male child presented with acute abdominal pain and bleeding per rectum. O/E he had dark brown macules on his face and buccal mucosa. A 8 cm pedunculated, lobulated polyp was excised from the small intestine. The presence of which of the following histologic feature characterizes this polyp?
- a) Mature goblet cells and absorptive cells
 - b) Lymphoid follicles in the stroma
 - c) Arborising network of smooth muscle fibres intermixed with lamina propria
 - d) Numerous eosinophils in the lamina propria
4. 28 year old male had trivial injury to his right hand. An X ray revealed a well circumscribed oval lucency in the 2nd metacarpal bone surrounded by a thin rim of radiodense bone. The characteristic histology would be the presence of
- a) large vascular spaces lined by endothelial cells
 - b) well circumscribed nodules of hyaline cartilage
 - c) benign spindle cells in a storiform pattern
 - d) curvilinear woven bony trabeculae surrounded by moderately fibroblastic proliferation

IV. Very Short Answers:

(10X2=20)

1. Differentiate between myofibres I & II seen in a muscle Biopsy.
2. What is Schiller Duvall body?
3. What are the diagnostic microscopic features of Hirschsprung Disease?
4. Classify mediastinal tumours
5. What is Zellballen?
6. Describe histology of pulmonary alveolar proteinosis.
7. What are the classical features of steatohepatitis?
8. Describe the morphology of Gouty Tophus.
9. What are thin basement membrane disease?
10. What are the most important risk factors involved in the development of alcoholic liver disease & what is the corner stone in the treatment of alcoholic liver disease?

[LE 115]

APRIL 2014

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
SYSTEMIC PATHOLOGY**

Q.P. Code :202012

Time : 3 hours

Maximum : 100 marks

I. Essay:

(2X10=20)

1. Discuss tumours of the testis.
2. Describe the role of renal biopsy in a patient with nephrotic syndrome.

II. Write short notes on:

(8X5=40)

1. Primary hyperparathyroidism
2. Assessment of prognosis in melanoma
3. Crohn's disease
4. Histological changes in chronic viral hepatitis
5. In situ and invasive lobular carcinoma of breast
6. Osteosarcoma
7. Synovial sarcoma
8. Neuroblastoma

III. Reasoning Out:

(4X5=20)

1. A 35-year-old man presented with dull pain in the right knee for the past 3 months. X-ray showed a lytic tumour involving the epiphysis and the metaphysis, eroding the subchondral bone plate. The tumour was covered by a thin shell of reactive bone. Which of the following tumours is this most likely to be?
 - a. Metastatic tumour
 - b. Chondroblastoma
 - c. Giant cell tumour
 - d. Fibrous dysplasia
2. A 70-year-old woman has difficulty keeping her room in order, wanders away from the house and has loss of memory. She has no history of seizures or trauma. What are the most likely histopathologic findings associated with her condition?
 - a. Infarction in the region of the caudate nucleus
 - b. Neurofibrillary tangles and cortical plaques
 - c. Gliosis in the hippocampus.
 - d. Degeneration of the substantia nigra

3. A 35-year-old woman has a mass in the neck which is a tumour with nests of polygonal cells in a stroma containing amyloid. Immunostaining for calcitonin is positive. She also has hypercalcemia. Which of the following neoplasms is she most likely to have?
- a. Follicular thyroid carcinoma
 - b. Medullary thyroid carcinoma
 - c. Parathyroid carcinoma
 - d. Metastatic small cell carcinoma
4. A 25-year-old woman with a history of oral contraceptives use for about 14 months presented with frequent episodes of vaginal bleeding and a 0.7 cm polypoid mass in the endocervical region. The ectocervix, uterus and adnexa appear normal. What is the biopsy of this mass most likely to show?
- a. Benign endocervical polyp
 - b. Endocervical adenocarcinoma
 - c. Clear cell carcinoma
 - d. Microglandular hyperplasia

IV. Very Short Answers:

(10X2=20)

- 1. Pleomorphic adenoma
- 2. Barrett's oesophagus
- 3. Schwannoma
- 4. Primitive neuroectodermal tumour
- 5. Histological changes in diabetic retinopathy
- 6. Condyloma acuminatum
- 7. Chordoma
- 8. Bronchioloalveolar carcinoma
- 9. Atrial myxoma
- 10. Brain in cerebral malaria

[LF 115]

OCTOBER 2014

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III - SYSTEMIC PATHOLOGY
Q.P. Code :202012

Time : 3 Hours

Maximum : 100 marks

I. Essay:

(2 x 10 = 20)

1. Classify lung tumors. Discuss the etiopathogenesis and molecular genetics of bronchogenic carcinoma.
2. Discuss the recent concepts in aetiopathogenesis and pathology of inflammatory bowel disease.

II. Write short notes on:

(8 x 5 = 40)

1. Germ cell tumors of testis.
2. Metabolic bone disorders.
3. Precancerous lesions of skin.
4. Vegetations of heart.
5. Cystic diseases of kidney.
6. Myopathies of gastrointestinal tract.
7. Premalignant conditions of prostate.
8. Non alcoholic fatty disease of liver.

III. Reasoning Out:

(4 x 5 = 20)

1. 30 year old female with H / O oral contraceptive intake presented with solitary space occupying lesion in the liver.
 - A. What is your diagnosis?
 - B. What is the morphology of this condition?
 - C. What are the differential diagnosis?
2. 15 year old boy presented with swelling right knee. X ray revealed metaphyseal lytic lesion with soft tissue extension.
 - A. What is your diagnosis?
 - B. What are the morphologic variants?
 - C. What are the prognostic factors of this condition?

3. 30 year old female presented with solitary nodule thyroid with cystic change and cervical lymphadenopathy
 - A. What is your diagnosis?
 - B. What are the histologic variants?
 - C. What are the genetic alterations associated with this condition?
4. 5 year old boy presented with delayed walking, difficulty in getting up and pseudohypertrophy of calf muscles. Familial inheritance pattern was noted on history elicitation.
 - A. What is your diagnosis?
 - B. What is the morphology?
 - C. What is the molecular genetics of this condition?

IV. Very Short Answers:

(10 x 2 = 20)

1. Mycosis fungoides.
2. Melanotic progonoma.
3. Takayasu arteritis.
4. Zuckerman disease.
5. Toxins produced by H.pylori.
6. Drop metastasis.
7. Sites of paraganglioma.
8. Mucocele.
9. Gastric autonomic nerve tumors.
10. Peyronie disease.

[LG 115]

APRIL 2015

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code : 202012

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Essay:

(2 x 10 = 20)

1. Discuss in the clinicopathologic features of prognostic importance in ovarian surface epithelial tumors.
2. Discuss about differential diagnosis and lab diagnosis of small round cell tumors of the bone.

II. Write Short notes on:

(8 x 5 = 40)

1. Etiopathogenesis of rheumatoid arthritis.
2. Gliomesenchymal tumors.
3. Role of histochemistry in muscle biopsy interpretation.
4. Asbestos related neoplasia.
5. Pheochromocytoma.
6. Cutaneous lymphoproliferative disorders.
7. Premalignant conditions of breast.
8. Metaplastic lesions of urinary bladder.

III. Reasoning Out:

(4 x 5 = 20)

1. 28 year old female presented with bleeding PV after a month following evacuation of molar pregnancy and serum B HCG titer was 100000 IU / ml
 - A. What is your diagnosis?
 - B. What is the morphology of this condition?
 - C. What are the complications?
2. 70 year old male presented with dysuria, hematuria and palpable hard nodule per rectum. Serum PSA was 100 ng / dl.
 - A. What is your diagnosis?
 - B. What are the morphologic variants of this condition?
 - C. How will you do follow up of the case?

3. 25 year old male presented with recurrent hemoptysis and hematuria, proteinuria, edema, hypertension and azotemia.
 - A. What is your diagnosis?
 - B. What is the morphology of this condition?
 - C. What is the pathogenesis?
4. 40 year old male presented with multiple Erythematous Tense Bullae which do not rupture easily
 - A. What is your diagnosis?
 - B. What is the morphology of this condition?
 - C. What is the differential diagnosis?

IV. Very Short Answers:

(10 x 2 = 20)

1. Interface hepatitis.
2. Medullary sponge kidney.
3. IHC markers of dysgerminoma.
4. Crooke hyaline change.
5. Garre's osteomyelitis.
6. Molecular genetics of meningioma.
7. Tau protein.
8. Lambertton Eaton Myasthenic syndrome.
9. PTEN and endometrial diseases.
10. Pancreatoblastoma.

[LH 115]

OCTOBER 2015

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code : 202012

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay:

(2 x 10 = 20)

1. Classification and pathology of tumors of odontogenic epithelium.
2. Classification of primary muscle diseases and discuss the role of muscle biopsy in diagnosis.

II. Write Short notes on:

(8 x 5 = 40)

1. Prostatic intraepithelial neoplasia.
2. Hirschsprung disease.
3. Immunofluorescence in glomerulonephritis.
4. Angioimmunoblastic lymphadenopathy.
5. Endomyocardial biopsy.
6. Tumors of orbit.
7. Non neoplastic polyp of GIT.
8. Thymoma.

III. Reasoning Out:

(4 x 5 = 20)

1. 40 / F presented with uterine mass and menorrhagia. Patient had hysterectomy and gross examination revealed circumscribed soft yellow mass in the uterus of 5 cm size.
 - A. What is your diagnosis?
 - B. What is the morphology?
 - C. What is the IHC marker used?

[PTO]

2. 50 / F presented with lump breast of 4 cm size with pushing margins, soft in consistency. HPE revealed sheets of large pleomorphic cells with prominent nucleoli.
- A. What is your diagnosis?
 - B. What is the prognosis of this tumor?
 - C. What are the IHC markers used?
3. 50 / m presented with solitary thyroid nodule and raised serum calcium.
- A. What is your diagnosis?
 - B. What are the prognostic factors of this tumor?
 - C. What are the IHC markers used?
 - D. What is the genetic defect associated?
4. 55 / m presented with multiple coin shadows in the lung. Trucut biopsy of the mass was done. Primary could not be evaluated.
- A. What are the differential diagnosis you can think of?
 - B. How will you proceed further?
 - C. What is the Immuno Histochemistry panel you would do?

IV. Very Short Answers:

(10 x 2 = 20)

- 1. Nesidioblastosis.
- 2. Collagenous colitis.
- 3. Amphicrine carcinoma.
- 4. Erythema nodosum.
- 5. SEGA.
- 6. 4 Virilizing ovarian tumors.
- 7. IHC scoring of her 2 / neu.
- 8. Microglandular adenosis.
- 9. Endosalpingiosis.
- 10. Piringer – Kuchinka Lymphadenitis.

[LI 115]

APRIL 2016

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code :202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 10 = 20)

1. Discuss vesiculobullous disorders of skin.
2. Discuss cystic neoplasms of pancreas.

II. Write short notes on:

(8 x 5 = 40)

1. Recent concepts in osteoarthritis.
2. Viral hepatitis.
3. Pathology of artificial cardiac valves.
4. Ulcers of small intestine.
5. Fungal pneumonias.
6. Krukenberg tumour.
7. Non seminomatous germ cell tumours of testis.
8. Membrano proliferative glomerulonephritis.

III. Reasoning Out:

(4 x 5 = 20)

1. A 18 year old girl presented with cystic SOL in the cerebellum. What is the most probable diagnosis?
2. A 45 year old gentleman presented with insidious onset of haematuria progressing to chronic renal failure. His brother had similar complaints. USG showed bilateral enlarged cystic kidneys. What is the probable diagnosis? Discuss the genetics, pathogenesis and clinical features of the same.

3. A 35 year old man underwent appendicectomy. On gross examination, a bright yellow lesion was seen in the tip of appendix. What is the probable diagnosis? Discuss the pathology of the lesion. Add a note on special stains which may be useful in the diagnosis?
4. A 55 year old male presented with a mass in the sacrococcygeal region. FNAC showed an aspirate of myxoid material. Discuss the differential diagnosis.

IV. Very Short Answers:

(10 x 2 = 20)

1. Primary CNS lymphoma.
2. Myositis ossificans.
3. Turban tumour.
4. Waterhouse - Friderichsen syndrome.
5. Berry aneurysm.
6. Endometrial polyp.
7. PSA.
8. Enzymes used in muscle biopsy.
9. Insular carcinoma of thyroid.
10. Stag horn calculus.

[LJ 115]

OCTOBER 2016

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code :202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay: (2 x 10 = 20)

1. Discuss the classification and current concepts in carcinoma of endometrium.
2. Discuss the role of squash preparations in neuropathology.

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

1. Hereditary hyperbilirubinemia.
2. Alveolar soft part sarcoma.
3. Chromophobe carcinoma of kidney.
4. Synovial biopsy.
5. Gastric lymphoma.
6. Odontogenic tumours.
7. Autoimmune hepatitis.
8. Ig A nephropathy.

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

1. A 60 year old female admitted with ascites was found to have a pelvis mass. At laparotomy the perineum was studded with gelatinous nodules. What is the condition called? Discuss the causes, differential diagnosis and pathology of the same.
2. A 50 year old female presented with a huge unilateral breast mass measuring 8x6x6cm. No micro calcification was seen on mammography. Excision of the mass was done. Grossly the lesion showed a cut cabbage appearance. What is the probable diagnosis? Discuss the FNAC and histopathologic findings.

3. A 45 year old male presented with an indolent slowly progressing ulcerated lesion near the left lower eyelid. A biopsy of the lesion was done. What is the probable diagnosis? Discuss the pathologic features.
4. A 3 year old child presented with mass in the right hypochondrium. Serum AFP level was markedly elevated. What is the probable diagnosis? Discuss the pathologic features.

IV. Very Short Answers:

(10 x 2 = 20)

1. Keratoacanthoma.
2. Renal papillary necrosis.
3. Porcelain gall bladder.
4. Libmann-Sachs endocarditis.
5. Prostatic intraepithelial neoplasia (PIN).
6. Caplan syndrome.
7. Giant cell arteritis.
8. Bronchiolo alveolar carcinoma.
9. Whipple's disease.
10. Hurthle cell.

[LK 115]

MAY 2017

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code :202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 10 = 20)

1. Classify and discuss polyps of the intestine. Add a note on adenoma-carcinoma sequence.
2. Define cirrhosis of liver. Discuss the role of liver biopsy in the diagnosis, evaluation and management of a patient with cirrhosis of liver.

II. Write short notes on:

(8 x 5 = 40)

1. Duchenne muscular dystrophy.
2. Myocarditis.
3. Papillary lesions of breast.
4. Bronchial carcinoid.
5. Role of testicular biopsy in male infertility.
6. Prognostic factors in neuroblastoma.
7. Recent concepts in endometrial hyperplasia.
8. Acinic cell carcinoma.

III. Reasoning Out:

(4 x 5 = 20)

1. A 25 year old male, a known case of Marfan syndrome came to emergency with sudden onset of excruciating pain in the anterior chest and radiating to the back. ECG did not reveal any changes. What is your probable diagnosis? Discuss about the pathology and morphology of the condition.
2. 6 year old child with h/o fever, sore throat 4 weeks ago was brought with complaints of oliguria, smoky urine. Clinical examination revealed mild hypertension and edema. What is the probable diagnosis? Discuss the etiopathogenesis, clinical features and morphology of the condition.

3. A 20 year old female presented with unilateral solid ovarian mass. The tumour cells were positive for c- kit, Oct3, Oct4. What is the probable diagnosis? Discuss the clinical features, pathology and prognostic factors of the tumour.
4. A 45 year old lady with history of contraceptive intake for years. USG showed solitary SOL in the liver. Discuss the differential diagnosis.

IV. Very Short Answers:

(10 x 2 = 20)

1. Pcoma.
2. Alpha -1antitrypsin.
3. Partial autopsy.
4. Gleason grading.
5. Menetriers disease.
6. Azoppari effect.
7. Variants of chondrosarcoma.
8. Markers used in differential diagnosis of myxoid soft tissue neoplasms.
9. Spitz naevus.
10. Cytogenetics of Ewing's sarcoma.

[LL 115]

OCTOBER 2017

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code :202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 10 = 20)

1. Enumerate tumors of Central Nervous System and describe in detail about meningioma, stating various types, morphology and molecular changes.
2. Describe about chondroid lesions of bone? Write in detail about Malignant Chondroid neoplasms.

II. Write short notes on:

(8 x 5 = 40)

1. Write about classification, morphology of carcinoid tumors of lung.
2. Write about Hirschsprung's disease.
3. Brief about GIST and differential diagnosis.
4. Describe all about Polyps of intestine.
5. Make a brief note of Precursor lesions of HCC.
6. Describe about Molecular mechanisms of breast cancer.
7. Write in detail about toxic Myopathies.
8. Briefly write about neurosyphilis.

III. Reasoning Out:

(4 x 5 = 20)

1. A 70 year old male presented with complaints of difficulty in passing urine and severe back ache. What's the diagnosis? Describe about etio-pathogenesis, morphology, grading and staging of the lesion.

2. A 6 months old baby presented with features of apnoea and died before resuscitation. Enumerate the causes of the possible diagnosis and morphological changes involved?
3. A 65 Year old male presented with swelling on right iliac fossa. USG revealed a mass in cecum. Some distant and deep seated lymph nodes are seen in abdominal cavity. Discuss about the possible tumors of this site and write in detail about any one of the lesion.
4. 25 Year old male presented with diabetes, skin pigmentation, loss of libido and hepatomegaly. What is your diagnosis? Write about classification and etio-pathogenesis of the condition.

IV. Very Short Answers:

(10 x 2 = 20)

1. Write about Sheehan syndrome and empty sella syndrome.
2. Write about pneumonia syndrome.
3. Discuss about vascular pathology in hypertension.
4. Write about tumors of nose, nasopharynx.
5. Write about esophageal causes of hematemesis.
6. Briefly write about causes of Jaundice.
7. Write about etiological factors of Acute pancreatitis.
8. Classify Glomerular diseases and write about chronic glomerulonephritis.
9. Write about grading and staging of prostatic carcinoma.
10. Write about characters of different types of endometrial carcinoma.

[LM 115]

MAY 2018

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

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

1. Discuss the Recent classification of Diffuse Gliomas based on histologic and genetic features. Describe the morphology of Glioblastoma and its variants.
2. Classify Gestational Trophoblastic Diseases. Discuss briefly the morphology and immunophenotype of Gestational Trophoblastic Tumours.

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

1. Barrett Esophagus.
2. Prostatic Intraepithelial Neoplasia.
3. Endomyocardial Biopsy.
4. Sclerosing Cholangitis.
5. Tumours of orbit.
6. Hereditary Hyperbilirubinemia.
7. Pindborg Tumour.
8. Pulmonary Alveolar Proteinosis.
9. Para testicular tumours.
10. Merkel cell carcinoma.

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. 25 year old male presented with a solitary tumour involving the epiphyses of humerus. Xray showed an eccentric radioluscent lesion with a sharp sclerotic margin and areas of calcification. The histopathology of the tumour showed chickenwire calcification. What is the diagnosis? Describe the other histological features of the tumour.
2. 20 year male presented with fever, hemoptysis, diarrhea and flushing. Bronchoscopy revealed a polypoid mass 2 cm in diameter arising in the right main bronchi. The mass was seen projecting into the lumen of the bronchus, covered by intact mucosa and penetrated the bronchial wall to fan out in the peribronchial tissue as a “collar button” lesion. Excised tumour on cutsection had a gray to yellow cutsurface. What is the diagnosis? Describe the histology and immunophenotype of the tumour.
3. 19 year old female presented with abdominal pain and rapidly growing right ovarian mass. Serum levels of Alpha feto protein was elevated. What is the diagnosis? Describe the morphology of the ovarian tumour.
4. 38 year old pregnant woman had vaginal bleeding with passage of grape like vesicles. Her uterus was disproportionately large for the stage of pregnancy. Ultrasonogram showed typical “Snowstorm” appearance. What is the diagnosis? Describe the pathogenesis and histology of the lesion.

[LN 115]

OCTOBER 2018

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss the etiology, morphology, grading and staging of Prostatic adenocarcinoma with a note on the clinical course.
2. Discuss Metabolic liver diseases. Write in detail about pathogenesis, morphology and clinical features of Hemochromatosis.

II. Write short notes on:

(10 x 5 = 50)

1. Osteosarcoma.
2. Mediastinal tumors.
3. Pulmonary alveolar proteinosis.
4. Rheumatoid Arthritis.
5. Chronic Pyelonephritis.
6. Autoimmune hepatitis.
7. Placental site trophoblastic tumor.
8. Papillary Carcinoma of Thyroid.
9. Cryptorchidism.
10. Celiac disease.

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. 29 year old female presented with vaginal bleeding after one month of evacuation of molar pregnancy and serum β HCG titer was 93,000 mIU / ml. Discuss the morphology and complications of this condition.
2. 5 year old boy presented with delayed walking, difficulty in getting up and pseudo hypertrophy of calf muscles. History revealed familial inheritance pattern. Discuss the pathogenesis and genetics of this condition.
3. 30 year old female presented with solitary nodule thyroid with cystic change and cervical lymphadenopathy. Discuss the morphology of this condition. Describe the variants.
4. 6 year old girl presented with hydrocephalus and space occupying lesion in the midline of the cerebellum. Discuss the molecular genetics and morphology of this condition.

[LO 115]

MAY 2019

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss Muscular dystrophies. Describe the pathogenesis and genetics of X-Linked Muscular Dystrophy with a note on morphology and clinical course.
2. Discuss in detail about etiology and pathogenesis of Inflammatory Bowel Disease. Describe the morphology and clinical course of Ulcerative colitis and mention the differences between Crohn's disease and Ulcerative colitis.

II. Write short notes on:

(10 x 5 = 50)

1. Cardiomyopathy.
2. Recent advances in grading of prostate adenocarcinoma.
3. Cholangio carcinoma.
4. Ulcers of small intestine.
5. Gastric lymphoma.
6. Meningioma.
7. Premalignant conditions of the oral cavity.
8. Paraganglioma.
9. Metabolic bone disorders.
10. Malignant Mesothelioma.

III. Reasoning Out:

(4 x 5 = 20)

1. A 32 year old man underwent appendicectomy. On gross examination, a bright yellow lesion was seen in the tip of appendix. What is the probable diagnosis? Discuss the pathology of the lesion. Add a note on special stains which may be useful in the diagnosis?
2. A 3 year old child presented with mass in the right hypochondrium. Serum AFP level was markedly elevated. Discuss the pathogenesis and morphology of this condition.
3. A 34-year-old woman has a mass in the neck which is a tumour with nests of polygonal cells in a stroma containing amyloid. Immunostaining for calcitonin is positive. Discuss the morphology of this condition and special stains used in diagnosis.
4. 28 year old primi developed vaginal bleeding in her 2nd trimester. Her BP was 160/100 mmHg. On examination, uterus appeared large for dates. Ultra sound revealed 'snow storm' intra uterine content without fetus. Discuss the pathogenesis and morphology of this condition.

[LP 115]

OCTOBER 2019

Sub. Code: 2012

M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Enumerate the Embryonal Brain tumours in children. Describe the clinical features, histology, subtypes, Molecular pathogenesis, Immunophenotype of the commonest Embryonal tumour of the brain.
2. Enumerate non small cell lung carcinoma. Discuss the morphology and Immunophenotype of Adenocarcinoma.

II. Write short notes on:

(10 x 5 = 50)

1. Role of Immunofluorescence in skin lesions.
2. Non Alcoholic Fatty Liver Disease.
3. Diffuse Alveolar Damage.
4. Collagenous colitis.
5. Placental Pathology in hypertensive diseases of pregnancy.
6. Menetrier Disease.
7. Focal Segmental Glomerulosclerosis.
8. Thymoma.
9. Cystic tumours of pancreas.
10. Endometrial hyperplasia.

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. 30 year old female underwent cholecystectomy. On cut section, mucosa of gallbladder had a speckled appearance resembling strawberry (Strawberry Gallbladder). What would be the diagnosis? Describe its pathogenesis and histologic appearance.
2. 15 year old male presented with localized pain in the foot worse at night and relieved by NSAIDS. Imaging studies showed dense cortical sclerosis surrounding a radioluscent nidus involving the right metatarsal bone. What would be the possible diagnosis and describe its morphological features?
3. 20 year old patient who was phenotypically female with signs of virilisation presented with a tumour involving gonad. On cut section the gonadal mass showed foci of calcification. What would be the possible diagnosis and describe its morphological features?
4. 40 year old male presented with headache, visual disturbances and endocrine defects. Imaging studies showed a suprasellar mass. Excised tumour on cut section had solid and cystic areas filled with fluid like machine oil. What is the diagnosis and describe its histologic features?

(MAY 2020 SESSION)

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Define Sudden Cardiac death? What are the most common causes for sudden cardiac death and explain in detail.
2. What is Glioblastoma Multiforme? What are the morphological features? How are the gliomas classified as per WHO? What is the molecular classification of Gliomas.

II. Write short notes on:

(10 x 5 = 50)

1. C-Kit positive tumors
2. Cytogenetics of Ewing's Sarcoma
3. NUT Carcinoma
4. Odontogenic tumors
5. Vesico-bullous lesions of skin
6. Cystic neoplasms of pancreas
7. Para-testicular tumors
8. Mucocoele of appendix
9. Hurthle cell neoplasms at various sites
10. Endomyocardial biopsy

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. A 45 year old female complaints of lump over right breast. Grossly it was solid and cystic. ER and Her2Neu negative.
 - a) What is the most probable diagnosis?
 - b) What are the other tumors that are ER and Her2Neu negative?
 - c) What is the significance of Ki-67 in these tumors?
 - d) What is the significance of Her2Neu overexpression?
2. A 65 year old female presented with post-menopausal bleeding. USG revealed mass in fundus measuring 2 cm in size. Adjoining endometrium appears atrophic.
 - a) What is your probable diagnosis?
 - b) What are the types and their prognostic significance?
 - c) What are the associated mutations?
 - d) What are the various histo-morphological types and grading system?
3. A 19 year old male, presented with hard testicular swelling. High orchidectomy was done. Gross examination showed variegated mass.
 - a) What is your probable diagnosis?
 - b) What are the biomarkers used to assess and their significance?
 - c) How are they categorized clinically?
 - d) What are the different stages of this?
4. A 60 year old male presented with abdominal pain. Post operatively gastrectomy specimen shows sub-serosal mass 30 cm in diameter, fleshy well circumscribed with overlying intact mucosa seen.
 - a) What is your probable diagnosis?
 - b) What is the differential diagnosis?
 - c) What are the mutations associated with these tumors?
 - d) What are the syndromes associated?
 - e) What is the specific IHC marker?

[LS 115]

**NOVEMBER 2020
(OCTOBER 2020 SESSION)**

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
*Q.P. Code: 202012***

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss etiopathogenesis of breast carcinoma describe morphomolecular approach in prognostic and predictive stratification.
2. Diabetes mellitus discuss its etiopathogenesis pathology and complications.

II. Write short notes on:

(10 x 5 = 50)

1. Acute interstitial pneumonia
2. Cystic lesions of liver
3. Classification of gastric carcinoma
4. Mutational profile in collision tumor
5. Endometrial intraepithelial neoplasia
6. IHC in peritoneal effusion cytology and small biopsy
7. Evaluation of postchemo response in cancer
8. Giant cell tumor of soft tissue and bone
9. Chronic graft versus host disease
10. Psedomyogenic hemangioendothelioma

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. Asymptomatic 38 year old woman who had screening chest x ray revealed multiple mass lesion with spicules and pleural indentation in both lungs. Further examination revealed no findings other than lung lesion. No systemic evidence of paraproteinemia but slight increase in serum IGG and IGM. Bone marrow smear is normo cellular. Discuss the lung lesion pathology.
2. 18 year old female presented with cystic space occupying lesion in cerebellum discuss pathology.
3. 62 year old female presents with a mass in sacrococcygeal region discuss differential diagnoses.
4. 42 year old female with fever, head ache, myalgia and cough. She gives history of insect bite and there was a blacknecrotic crusted area surrounded by cellulitis seen on the abdomen. She developed severe cough, dyspnea and tachycardia. Discuss the differentia diagnoses

[LS 115]

BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Enumerate skin adnexal tumors. Discuss about tumors with glandular differentiation. Brief on MAPK pathway, IHC and molecular profile.
2. Pathogenesis and pathology of cirrhosis. Write about post hepatitis cirrhosis.

II. Write short notes on:

(10 x 5 = 50)

1. Autoimmune hepatitis.
2. Hepato billiary cystic neoplasm.
3. Colorectal carcinoma prognostic stratification.
4. Merkle cell carcinoma.
5. Endometrial tumors.
6. IHC in soft tissue tumors.
7. Ancillary techniques in diagnostic algorithm.
8. Laryngeal carcinoma.
9. Ig 4 related chronic inflammation.
10. SARS pathology.

III. Reasoning Out:

(4 x 5 = 20)

1. 41 year old male presented with abdominal discomfort large tumor was excised from the mesentery attached to rectosigmoid colon hpe showed hemangiopericytoma pattern followup scan showed left hepatic lobe mass needle core biopsy high grade neoplasm undifferentiated .
2. 18 year old female presented with cystic space occupying lesion in cerebellum discuss pathology.
3. 62 year old female presents with a mass in sacrococcygeal region discuss differential diagnoses.
4. 21 year old female with a adnexal mass right side on usg appeared cystic and solid presented with symptoms of apoplexy probable diagnosis and discuss pathology.

[MD 0721]

[MD 1121]

**NOVEMBER 2021
(OCTOBER 2021 SESSION)**

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss role of endoscopic biopsy in diagnosis of gastrointestinal lesions.
2. Define nephritic syndrome. Classify nephritic syndrome. Discuss the role of renal biopsy in the categorization of the various types of glomerular diseases.

II. Write short notes on:

(10 x 5 = 50)

1. Cutaneous lesions in AIDS.
2. Microscopic variants of osteogenic sarcoma.
3. Mesothelioma.
4. Duchenne muscular dystrophy.
5. Neurocysticercosis.
6. Clear cell sarcoma of kidney.
7. Metaplastic lesions in endometrium and cervix.
8. Crohn's disease.
9. Myocarditis.
10. Prognostic markers in liver cell carcinoma.

III. Reasoning Out:

(4 x 5 = 20)

1. A 30 year old female presented with a small elevated, firm and tender nodule, reddish in colour at the subungual region of left index finger
 - a) What is your provisional diagnosis?
 - b) Describe the histological pattern.
 - c) Discuss in detail the differential diagnosis.
2. A 66 year old male seeks medical attention with a huge swelling at mid thigh, present for 6 months, rapidly increasing in size. X-ray: Soft tissue lump
 - a) What are the possible causes?
 - b) How can you confirm your diagnosis?
3. A 31 year old female presents with multiple skin bulla, vesicles and ulceration distributed widely over trunks and extremities along with mouth ulceration
 - a) What are the possible causes?
 - b) Write in detail about any two conditions.
4. A 25 year old female with amenorrhoea for 10 weeks is complaining of excessive vaginal bleeding and passage of grape like structures
 - a) What is your provisional diagnosis?
 - b) What can be other possibilities?
 - c) How can you confirm your diagnosis?

[MD 1121]

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

[MD 0522]

MAY 2022

Sub. Code: 2012

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

PAPER III – SYSTEMIC PATHOLOGY

Q.P. Code: 202012

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss vesiculobullous lesion of skin. Give a detailed account on value of immunofluorescence techniques in diagnosis of skin disorders.
2. Describe the pathology of malabsorption syndromes.

II. Write short notes on:

(10 x 5 = 50)

1. Biochemical indicators of atherosclerosis.
2. Eosinophilic enteritis.
3. Histological spectrum of hepatocellular carcinoma.
4. Xanthogranulomatous pyelonephritis.
5. Alports syndrome.
6. Endometriosis.
7. Medullary carcinoma breast.
8. Aneurismal bone cyst.
9. Benign neoplasms of adipose tissue.
10. Duchennes muscular dystrophy.

... 2...

III. Reasoning Out:

(4 x 5 = 20)

1. A 37 year old female presented with large lower abdominal swelling for 3 months. USG showed large right ovarian mass 16 cm in diameter with solid and cystic areas and multiple deposits in omental tissue.
 - a) What is your provisional diagnosis?
 - b) Discuss the differential.
2. A 63 year old male presents with slowly progressive weakness, anorexia, fatigue and weight loss for 1 year. O/E: There is edema and hypertension. Investigations reveals urine protein++, blood urea 86 mg/dl, serum creatinine 3.2 mg/dl.
 - a) What is your provisional diagnosis?
 - b) What are the most common causes?
 - c) How will you differentiate the condition?
3. A middle age female is complaining of chronic cough, chest pain and shortness of breath for more than one year. Chest X-ray shows bilateral hilar lymphadenopathy.
 - a) What is your provisional diagnosis?
 - b) What other possibilities can come into consideration?
 - c) How will you confirm your diagnosis?
4. A 70 year old man complains of back pain and frequent urination. Rectal examination shows presence of hard nodular area over prostate.
 - a) What is your provisional diagnosis?
 - b) Write the histological diagnosis.

[MD 0522]

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

[MD 1022]

OCTOBER 2022

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code: 202012**

Time : 3 Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Pathogenesis, types, morphology, staging of Malignant Tumors of Endometrium.
2. Enumerate non small cell lung carcinoma. Discuss the morphology and immunophenotype of Adenocarcinoma.

II. Write short notes on:

(10 x 5 = 50)

1. Classify COPD, Describe in detail about Bronchiectasis.
2. Write about Hypertrophic Gastropathies.
3. Cystic tumours of pancreas.
4. Write in detail about toxic Myopathies.
5. Briefly write about neurosyphilis.
6. Make a brief note of precursor lesions of HCC.
7. Describe about molecular mechanisms of breast cancer.
8. Write in detail about α_1 antitrypsin deficiency.
9. Briefly write about acute kidney injury.
10. WHO Classification of Ovarian Neoplasms and describe briefly about Transitional Cell tumor.

III. Reasoning Out:

(4 x 5 = 20)

1. A 70 year old male presented with complaints of difficulty in passing urine and severe back ache.
 - a. What's the probable diagnosis?
 - b. Describe about etio-pathogenesis, morphology of the lesion.
 - c. Do the different grading system and staging of the lesion.
 - d. What is the biochemical markers associated with it?

2. A 15 Year old boy presented with painful swelling of Rt. Knee. X-ray revealed metaphyseal lytic lesion with soft tissue extension.
 - a. What is your diagnosis?
 - b. What are the morphological variants?
 - c. What are the prognostic factors of this condition?
 - d. Mention predisposing factors.

3. A 65 Year old male presented with swelling on right iliac fossa. USG revealed a mass in caecum. Some distant and deep seated lymph nodes are seen in abdominal cavity.
 - a. Discuss about the possible tumors of this site.
 - b. What is the differential diagnosis for the lesion at this site?
 - c. How to confirm your diagnosis?
 - d. Write in detail about any one of the lesion.

4. A 50 Year old female presented with breast lump of size 4cms. Soft in consistency. HPE revealed large pleomorphic cells with prominent nucleoli.
 - a. What is your diagnosis?
 - b. Describe histopathological diagnostic criteria for the above lesion.
 - c. What are the IHC markers that can be useful?
 - d. What is the prognosis of this lesion?

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

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code: 202012**

Time : 3 Hours

Maximum : 100 Marks

I. Essay: (2 x 15 = 30)

1. Discuss classification of Carcinoma of Breast, discuss the epidemiology, pathogenesis, prognostic and predictive factors of Carcinoma of Breast.
2. Role of IHC in diagnosis of Soft Tissue Sarcomas.

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

1. Shock lung.
2. Chordoma.
3. Splenic lymphoma.
4. Krukenberg tumor.
5. Clear cell sarcoma of kidney.
6. Budd Chiari syndrome.
7. Glomeruloid hemangioma.
8. Hypertrophic cardiomyopathy.
9. Cardiac myxoma.
10. Synovial biopsy.

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

1. A 16-years-old male comes to OPD with high fever and bilateral testicular swelling for 2 days. On enquiry, there is H/O fever and bilateral parotitis one week back.
 - a) What is your provisional diagnosis?
 - b) How can you confirm your diagnosis?

2. Female aged 33 years is admitted into emergency ward for frequent bouts of bloody diarrhoea with tenesmus and toxic features. H/o similar attacks twice during last one year are reported.
 - a) What are the possible causes?
 - b) How will you confirm your diagnosis?

3. A 32-year female complains of intermittent attacks of diarrhea, cyanosis and flushing for 4 years along with repeated attacks of bronchoconstriction. She also admits of dry cough and occasional haemoptysis for same duration. Chest X-ray shows a small circumscribed nodule in the left lung.
 - a) What is the most possible diagnosis?
 - b) How will you proceed for confirmation of your diagnosis?

4. A 68-year male, smoker, presented with breathlessness, cough and chest pain for 2 months. O/E: Ptosis with puffy face, swelling and congestion of upper part of chest and neck, hoarseness of voice, clubbing along with tender swelling of right wrist joint.
 - a) What is the most likely diagnosis?
 - b) How can you explain all the features?
 - c) What are other causes and how will you proceed for diagnosis?

[MD 0723]

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

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2012

**M.D. DEGREE EXAMINATION
BRANCH III – PATHOLOGY
PAPER III – SYSTEMIC PATHOLOGY
Q.P. Code: 202012**

Time : 3 Hours

Maximum : 100 Marks

I. Essay: (2 x 15 = 30)

1. Classify Pigmented Lesions of Skin. Discuss in detail the morphologic spectrum, molecular changes in pigmented Neoplasms of Skin and the prognostic factors. Add a note on Pre malignant pigmented lesions.
2. WHO classification of Lung Neoplasms. Discuss about the etiopathogenesis, morphology and molecular diagnosis of Lung Carcinomas.

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

1. Serrated lesions of Colorectum.
2. Role of HPV in Head and Neck Cancers.
3. Mimickers of Prostatic carcinoma.
4. Cystic lesions of Bone.
5. Restrictive cardiomyopathy.
6. Metaplastic carcinoma of Breast.
7. Demonstration of Mucin in Gastro-intestinal pathology.
8. Prognostic markers in Hepatocellular carcinoma.
9. Follicular thyroid Neoplasms.
10. Odontogenic Tumors.

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

1. 45 / M presented with repeated attacks of bloody diarrhea, with stingy mucus and the patient also had skin lesions, uveitis and polyarthritis.
 - a) What is your diagnosis?
 - b) What is the morphology of Colonic mucosal biopsy?
 - c) What is the differential diagnosis?
 - d) What are the complications?

2. 50 /M alcoholic presented with acute abdominal pain which was radiating to upper back and shoulder, Serum Enzyme study was done to clinch the diagnosis.
 - a) What is your diagnosis?
 - b) What is the morphology?
 - c) What are the complications?
 - d) What are the lab findings?

3. 35 /M who has history of paan chewing since adolescent age developed white plaque like lesion in the oral cavity.
 - a) What is your diagnosis?
 - b) What are the differential diagnosis? And how will you distinguish it from your differential diagnosis?
 - c) What is the risk of Malignancy?
 - d) What are the Histopathologic findings of the lesion?

4. 55 / F presented with right knee pain and imaging of right knee revealed degeneration changes.
 - a) What is your diagnosis?
 - b) What is the differential diagnosis?
 - c) Whether other bones also affected?

[MD 1223]