

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT. S.Y. M.B.B.S.

A) GENERAL PATHOLOGY: (n=35)

1. Definitions and causes of diseases:-

Must know: Able to recall common definitions in Pathology and causes of cell injury.

2. Modes of cell injury:-

Must know: Able to appreciate mechanisms of cell injury & relate them to the morphological changes.

3. Necrosis & gangrene:-

Must know:- Able to recognize types of necrosis and gangrene at gross and microscopic levels.

Desirable to know:- Apoptosis and its relevance.

4. Intracellular accumulations and alterations:-

Must know: Able to list the types of intracellular accumulations & alterations in reversible cell injury along with alterations in cell organelles and cytoskeleton.

5. Cellular Adaptations/ Growth disturbances:-

Must know: Define the various growth disturbances and appreciate the clinical significance of each.

6. Acute inflammation:-

Must know: Define and describe changes occurring in acute inflammation and integrate the changes with morphological patterns of injury.

7. Chemical mediators of Inflammation:-

Must know: Definition, Classification, description of each type, role of acute chronic inflammation.

8. Chronic inflammation (including granulomatous):-

Must know:- differentiate it from acute inflammation, describe aetiology, patterns and systemic effects of granulomas.

9. Regeneration and repair (general):-

Must know:- Define & describe regeneration and repair and understand the mechanisms and list factors modifying repair.

10. Repair in specialized tissues:-

Must know: Describe repair in fractures and parenchymal organs and list modifying factors and complications.

11. Oedema:-

Must know:- Define oedema, classify and describe pathogenesis & correlate morphology with clinical significance with emphasis on transudate and exudate.

12. Shock:-

Must know: Define, classify and understand pathogenesis, recognize the of mediators and stages of shock.

13. Thrombosis:-

Must know: Describe etio-pathogenesis, fate, morphology and effects of thrombosis.

14. Embolism and Infarction:-

Must know:- Enumerate types of embolism and infarction, recognize morphological changes and correlate clinical significance.

15. Hyperaemia and Haemorrhage:-

Must know: Definitions, morphology of acute and chronic congestions, clinical significance of haemorrhage.

16. Disturbances of pigment metabolism:-

Must know:- State the type of pigment disturbances and describe the changes associated with common disturbances like lipofuscin, melanin, Hemosiderin and Bilirubin.

17. Disturbances of Mineral metabolism:-

Must know: Describe the types and morphological changes of calcification. Desirable to know: Disturbances of other minerals like zinc etc.

18. Genetic disorders:-

Must know:- Normal karyotype, classification of genetic disorders, types of genetic change, Down's syndrome, Klinefelter's syndrome, Turner's syndrome Desirable to know:- Lysosomal storage disorders, glycogen storage diseases, methods of disease diagnosis.

19. Hypersensitivity reactions:-

Must know:- Classify, differentiate between different types of Hypersensitivity reactions.

Desirable to know:- Be conversant with transplant rejections.

20. Autoimmune diseases:-

Must know:- Understand mechanisms of autoimmunity and diagnose common autoimmune diseases; overview of SLE.

21. Amyloidosis:-

Must know: Definition, physical characters, chemical characters, classification, pathogenesis morphology, clinical correlation and lab diagnosis.

22. AIDS:-

Must know:- Understand the natural history of the disease and recommend relevant investigations in the management.

23. Typhoid fever:-

Must know:- Correlate Pathogenesis with morphology and clinical features of the disease.

24. Syphilis:-

Must know:- Classify and describe lesions in various stages of syphilis

25,26,27 (3 lectures) Tuberculosis:-

Must know: Appreciate the importance of tuberculosis in the present day Context, its Pathogenesis & basic histopathology. List and describe the various pulmonary lesions of tuberculosis. Describe changes in various organs in TB and understand their functional correlation, sequelae, lab diagnosis and TB in AIDS.

28. Leprosy:-

Must know:- Classify, differentiate between different types of leprosy and describe the diagnostic histologic features and sequelae.

29. Fungal diseases:-

Desirable to know: Classification and be conversant with relevance of fungal diseases in the world with emphasis on opportunistic fungal infections.

30. Malaria:-

Must know:- Identify, morphological features in vivax and falciparum malaria and recommend lab investigations in the management.

31 & 32. Neoplasia - Nomenclature and classification:-

Must know:- Define important terms, classify and differentiate benign from malignant neoplasms.

Desirable to know: Precancerous conditions

33. Neoplasia - Carcinogenesis:-

Must know:- Understand carcinogenesis and analyse the mechanism of genetic changes in carcinogenesis.

34. Neoplasia - Biology and Lab diagnosis:-

Must know:- Understand the tumour host interactions in neoplasia and recommend the diagnostic workup for detection of cancer.

35. Neoplasia - Spread, grading and staging:-

Must know:- Biology of tumour growth, metastases, types, mechanisms, clinical correlations, grading of cancer and staging of cancer.

B) HAEMATOLOGY: (n=15)

1. Introduction to haematology and hemopoiesis:-

Must know:- Understand the importance of haematology in clinical practice and enumerate the stages of hemopoiesis.

2. Anaemias (general):-

Must know: Definition, classify anaemia by various methods, clinical features and lab approach to anaemias.

3. Iron deficiency anaemia:-

Must know: Definition, causes, haematological features, morbid anatomical features, laboratory diagnosis and differential diagnosis.

4. Megaloblastic anaemia:-

Must know: Definition, causes, haematological features, morbid anatomical features, laboratory diagnosis and differential diagnosis.

5. Haemolytic anaemia:-

Must know: Definition, classification, Pathogenesis and haematological features.

6. Haemoglobinopathies:-

Must know: Definition, classification, Lab diagnosis of Thalassaemia and Sickle cell anaemia.

7&8. Haemorrhagic disorders:-

Must know:- Classify haemorrhagic disorders, describe clinical distinction between Purpuras and Coagulation disorders and laboratory screening tests for haemorrhagic disorders. Normal coagulation and fibrinolytic mechanism. Describe etiopathogenesis, clinical significance and lab diagnosis of haemophilia and DIC.Describe etio-pathogenesis, morphological features (haematological and morbid anatomical) clinical significance and lab diagnosis of ITP.

9. Leukocytic disorders:-

Must know:- Leukocytosis, Leukopenia and Leukemoid reactions.

10. Acute Leukaemias:-

Must know:- Classify and differentiate different types of acute Leukaemias.

11. Chronic Leukaemias:-

Must know: Definition, general features, classification, aetiology, haematological change, morbid anatomy, clinical course and lab. investigations.

12. Paraproteinemia:-

Desirable to know:- Understand the relevance of paraproteinemia's and integrate the various diagnostic modalities with the diagnosis.

13. Aplastic Anaemias:-

Desirable to know: Aplastic anaemias and Agranulocytosis.

14. Blood groups:-

Must know:- Appreciate the relevance of blood groups in haematology and transfusion medicine. Erythroblastosis foetalis

15. Blood Transfusion:-

Must know:- Indications, selection of blood donors, autologous transfusions, complications of blood transfusions, investigation of suspected transfusion reactions.

C) SYSTEMIC PATHOLOGY: (n=46)

1. Atherosclerosis:-

Must know: Definition, etiopathogenesis, gross and microscopic description, complications and clinical correlation.

2. Hypertension:-

Must know:- Relate the mechanisms of the disease to the clinical course and sequelae.

3. Other diseases of blood vessels:-

Must know:- Develop an index of suspicion for vasculitides and aneurysms.

4. Ischaemic heart disease:-

Must know:- Incidence, risk factors, Pathogenesis, morphological changes, clinical course, complications and investigations.

5. Congenital heart disease:-

Desirable to know:- Correlate the anatomical malformations of disorders to the clinical consequences of the disease.

6. Rheumatic heart disease:-

Must know:- Incidence, etiopathogenesis, morbid anatomy, histopathology, lesions in the organs, clinical course and sequelae.

7. Endocardial and pericardial diseases:-

Must know:- Infective endocarditis - Pathogenesis, morphology, differential diagnosis of cardiac vegetations, aetiology and basic morphology of different forms of pericarditis.

8. Cardiomyopathies:-

Desirable to know:- Recognize the disorders as part of differential diagnosis in primary myocardial diseases.

9. Pneumonias:-

Must know:- Aetiology, classification, gross, histopathological description in different forms and complications.

10. Lung Abscess and Bronchiectasis:-

Must know:- Etiopathogenesis, morphological appearances and complications.

11. Chronic Bronchitis and Emphysema:-

Must know: Pathogenesis, types of emphysema, definition of chronic bronchitis, morbid anatomy and cardiac sequelae.

12. Occupational lung diseases:-

Must know:- Types, etiopathogenesis, gross anatomical differences between different forms and sequelae.

13. Tumours of lung and pleura:-

Must know:- Classification, aetiology, gross appearances, histological description of important forms, natural history, pattern of spread, Para neoplastic syndromes and secondary Pathology.

14. Lesions of oral cavity and salivary glands:-

Must know: Differential diagnosis of swelling of salivary glands, oral cancer - etiopathogenesis, gross and histopathological descriptions.

15. Gastritis and Peptic Ulcer:-

Must know: Definition of peptic ulcer, etiological factors, gross and microscopic appearances and sequelae.

Desirable to know: Overview of aetiology and types of gastritis.

16. Ulcers of Intestines:-

Must know:- Etiological classifications, Morphological appearances of typhoid, tubercular, amoebic ulcers and bacillary dysentery. Differential diagnosis of different forms of ulcers.



17. Idiopathic Inflammatory Bowel disease:-

Must know:- Enumerate similarities and differences between the two component disorders viz., Crohn's disease and ulcerative colitis.

18. Tumours of upper GIT:-

Must know:- Etiopathogenesis, morphological features of carcinoma oesophagus, classification and morbid anatomy and histopathology of gastric carcinomas. Desirable to know:- Overview of carcinoid tumours of GIT.

19. Tumours of lower GIT:-

Must know:- Pathology of carcinoma colon.

Desirable to know:- Intestinal polyps & GI stromal tumours.

20. Viral Hepatitis:-

Must know: Aetiology, clinical source and enzymology, salient histological features and sequelae.

21. Alcoholic liver disease:-

Must know: Pathogenesis, morphological manifestations and correlation with clinical features.

22. Cirrhosis:-

Must know:- Etiopathogenesis, classification, important histological features and differential diagnosis.

23. Tumours of liver, Pancreas and gall bladder:-

Must know: - Pathology of Hepatocellular carcinoma.

Desirable to know:- Pathology of tumours of Pancreas and gall bladder.

24. Diabetes mellitus:-

Must know:- Classification, pathogenesis of system involvement, sequelae and complications.

25. Acute nephritis and rapidly progressive GN:-

Must know:- Understand and integrate clinical and pathologic features of these syndromes.

26. Nephrotic syndrome:-

Must know:- Integrate clinical and pathological features of this disorder.

27. Renal failure:-

Must know:- Definitions, criteria, aetiology, systemic manifestations and investigations.

28. Pyelonephritis and interstitial Nephritis:-

Must know: Aetiology, Pathogenesis of Pyelonephritis acute and chronic morphological features and clinical correlation.

29. Tumours of kidney and Pelvis:-

Must know: Classification, Morphological features, clinical course including Para neoplastic syndromes of common tumours.

30. Tumours of testis and Prostate:-

Must know:- Classification, salient morphological features of most common tumours and clinical course.

31. Tumours of Cervix and Uterus:-

Must know:- Etiopathogenesis, salient morphological features, dysplasia and role of cytological screening.

32. Tumours of Ovary and trophoblastic tissue:-

Desirable to know:- Classification and morphological description of important types.

33. Non-neoplastic and Neoplastic lesions of the breast:-

Must know:- Classification, morphological features and grading of carcinoma breast and differential diagnosis of breast swellings.

34. Non-neoplastic lesions of lymph nodes and Spleen:-

Must know:- Aetiology, differential diagnosis, morphological features of common causes of lymphadenopathy, common causes and appearances of splenomegaly.

35. Hodgkin's Lymphoma:-

Must know: Definition, classification, salient diagnostic features and clinical course.

36. Non-Hodgkin's Lymphoma:-

Must know: Definition, classification, salient diagnostic features and clinical Correlation.

Desirable to know: - Extra nodal lymphomas.

37. Tumours of skin - Non-pigmented:-

Must know:- Classification, morphological features of most common types and natural history.

38. Tumours of skin - Pigmented:-

Must know:- Classification, morphological features of common naevi, natural history of malignant melanoma.

39 &40. Soft tissue tumours:-

Must know:- Classification, morphological features of lipomatous, fibrous and blood vessel tumours. Morphological features of neural, muscle and fibro histiocytic tumours.

41. Non-neoplastic lesions of bone and joints:-

Must know:- Etiopathogenesis and morphological changes of common arthritis and osteomyelitis.

42 & 43. Tumours of bone, cartilage and joints:-

Must know: Classification, radiological and pathological features of important bone tumours (Osteosarcoma, Osteochondroma, GCT and Ewing's sarcoma).

44. Inflammatory and neoplastic conditions of CNS:-

Must know:- Morphological features and differential diagnosis of meningitis. Desirable to know:- Classification, morphological features of important CNS tumours, clinical course and sequelae (Meningioma and Gliomas).

45. Lesions of Thyroid:-

Must know: Differential diagnosis of thyroid nodule.

46. Myopathies:-

Desirable to know:- Differential diagnosis of common muscle disorders.

D) CLINICAL PATHOLOGY: (n=3)

1. Differential diagnosis of Jaundice:-

Must know:- The differential diagnosis and laboratory investigations in jaundice

2. Renal function tests:-

Must know: Laboratory approach to a case of renal dysfunction

1. Diabetes mellitus:-

Must know:- Laboratory diagnosis of Diabetes mellitus

E) AUTOPSY: (n=1)

Must know:- Indications and techniques of medical autopsies

Tutorials

GENERAL PATHOLOGY:

- 1. Cell injury and cell death
- 2. Cellular accumulations
- 3. Inflammation and repair
- 4. Circulatory disturbances
- 5. Immunological disorders
- 6. Infections
- 7. Neoplasia

HAEMATOLOGY:

- 1. Anaemias
- 2. Leukaemias
- ilisiksikei com 3. Interpretation of haematological case charts and identification of instruments
- 4. Haemorrhagic disorders

SYSTEMIC PATHOLOGY:

- 1. Atherosclerosis and IHD
- 2. Rheumatic heart disease
- 3. Pneumonias
- 4. Tumours of lung
- 5. Oral cancer
- 6. Peptic Ulcer
- 7. Cirrhosis
- 8. Glomerulonephritis
- 9. Carcinoma Breast
- 10. Carcinoma Cervix
- 11. Bone Tumours



- 12. Museum specimens
- 13. Museum specimens

CLINICAL PATHOLOGY:

- 1. Glucose Tolerance Test
- 2. Renal Function Tests
- 3. Differential Diagnosis of Meningitis
- 4. Identification of needles and instruments used in clinical pathology

AUTOPSY:

CPC of common diseases like 1. Tuberculosis 2. Myocardial infarction 3. Carcinoma/sarcoma 4. Hypertension by students (2 or 3)

d. Term-wise distribution

1st term: 1. General Pathology 2. General Neoplasia 3. Haematology & Transfusion Medicine

2nd term: 1. Systemic Pathology 2. Systemic Neoplasia 3. Clinical Pathology 3rd term: Tutorials & Revision.

e. Practicals: Total hours, number & contents

Total hours: 110 Number: 44

Contents:

A) GENERAL PATHOLOGY: (n=12)

- 1. Microscopy and tissue processing
- 2. Identify the common types of cells by light microscopy
- 3. Intracellular accumulation
- 4. Acute inflammation
- 5. Chronic inflammation and Repair
- 6. Thrombosis, embolism, infarction and gangrene
- 7. Oedema and congestion
- 8. Disturbances of pigment metabolism
- 9. Tuberculosis
- 10. Leprosy
- 11. Amyloidosis
- 12. Disturbances of growth (Atrophy, hypertrophy, hyperplasia, metaplasia, Dysplasia, hypoplasia)

B) HAEMATOLOGY: (n=7)

- 1. Collection of specimen, anticoagulants and common haematological tests (Hb)
- 2. Common Haematological Counts (TLC, DLC) & Interpretation of ESR
- 3. Haemopoiesis
- 4. Investigations in Anaemia
- 5. Investigations in Leukaemia
- 6. Investigations in haemorrhagic disorders
- 7. Blood Banking



C) SYSTEMIC PATHOLOGY: (n=18)

- 1. Diseases of blood vessels (Atherosclerosis, syphilitic aortitis)
- 2. Diseases of Heart (IHD & RHD)
- 3. Pneumonias
- 4. Tumours of lung
- 5. Diseases of kidney
- 6. Gross and Microscopic features of peptic ulcer and duodenal ulcer
- 7. Gross and Microscopic features of other intestinal ulcers
- 8. Tumours of GIT
- 9. Diseases of Liver
- 10. Lymphomas
- 11. Diseases of male and female genital system
- 12 &13. Tumours of breast
- 14. Tumours of skin (Pigmented)
- 15. Tumours of skin (non-pigmented)
- 16. Soft tissue tumours
- 17. Tumours of bone
- 18. Diseases of thyroid

D) CLINICAL PATHOLOGY: (n=5)

- 1. Urine RE Carryout a bedside routine urine examination and interpret the results.
- 2. Pregnancy test and Semen Analysis (Practical demonstration).
- 3. Common cytological preparations (lecture demonstration).
- 4. CSF examination.
- 5. Serous effusion examination.

1 & 2) To study and describe five autopsy reports.

For the batches joining in June 2001 and later

List of Slides and Specimens that should be shown during the Pathology Practical Classes

These are grouped under two headings: The students

- 1) must see (M)
- 2) desirable to see (D)

Please note that this will be applicable for the batch which will be joining Pathology term in June / July 2001 and later.

DRAWING SLIDES:

HISTOPATHOLOGY:

- 1. Kidney cloudy change (M)
- Fatty change liver (M) 2.
- Uterus leiomyoma with hyaline change (M) 3.
- Kidney amyloid (M) 4.



- 5. Lymph node caseous necrosis (M)
- 6. Kidney infarct (Coagulation necrosis) (M)
- 7. Acute ulcerative appendicitis (M)
- 8. Pyogenic meningitis (M)
- 9. Lepromatous leprosy skin (M)
- 10. Tuberculoid leprosy skin (M)
- 11. Actinomycosis (M)
- 12. Granulation tissue (M)
- 13. Ileum typhoid ulcer (M)
- 14. Tuberculous lymphadenitis (M)
- 15. Amoebic colitis (M)
- 16. Lung haemosiderin pigment or CPC (M)
- 17. Liver CPC (M)
- 18. Artery recent / organised thrombus (M)
- 19. Hashimoto's thyroiditis (D)
- 20. Skin papilloma (M)
- 21. Squamous cell carcinoma (M)
- 22. Adenocarcinoma Colon (M)
- 23. Lymph node metastasis (M)
- 24. Skin capillary haemangioma (M)
- 25. Cavernous haemangioma (M)
- 26. Benign cystic teratoma (Dermoid cyst) (M)
- 27. Stomach chronic peptic ulcer (M)
- 28. Liver Viral hepatitis (Massive/ sub-massive necrosis) (D)
- 29. Liver- portal and biliary cirrhosis (M)
- 30. Lung lobar and broncho pneumonia (M)
- 31. Lung fibrocaseous tuberculosis (M)
- 32. Heart rheumatic myocarditis (D)
- 33. Heart healed infarct (M)
- 34. Aorta atherosclerosis (M)
- 35. Kidney crescentic glomerulonephritis (M)
- 36. Kidney chronic glomerulonephritis (M)
- 37. Kidney chronic pyelonephritis (M)
- 38. Kidney RCC (D)
- 39. Benign prostatic hyperplasia (M)
- 40. Testis seminoma (M)
- 41. Uterus leiomyoma (M)
- 42. Products of conception (M)
- 43. Hodgkin's lymphoma (M)
- 44. Brain tuberculous meningitis (M)
- 45. Brain meningioma (D)
- 46. Bone osteogenic sarcoma (M)
- 47. Bone chondroma (M)
- 48. Bone osteoclastoma (M)
- 49. Skin melanoma and nevus (M)
- 50. Breast fibroadenoma (M)
- 51. Breast carcinoma (M)
- 52. Thyroid colloid goitre (D)
- 53. Thyroid papillary carcinoma (D)
- 54. Skin basal cell carcinoma (M)

HAEMATOLOGY:

- 1. Acute blast cell leukaemia (M)
- 2. Chronic myeloid leukaemia (M)
- 3. Eosinophilia (M)
- Iron deficiency anaemia (M) 4.
- 5. Haemolytic anaemia (M)
- Macrocytic anaemia (M) 6.
- Leucocytosis (M) 7.
- 8. Various biochemical charts - LFT, GTT, CSF, etc (M)

LIST OF SPECIMEN:

1. Cell injury and adaptation (Degeneration)

- a) Liver - fatty change (M)
- Kidney cloudy change (M) b)
- Aorta atheroma (M) c)
- d) Atheroma with calcification (D)
- Kidney stones (M) e)

2. Amyloidosis

- a) Kidney - amyloidosis (M)
- Spleen amyloidosis (M)

3. Necrosis and Gangrene

- Kidney infarct (M) a)
- Spleen infarct (M) b)
- Intestine gangrene (M) c)
- Foot gangrene (M) d)
- a) Rankei com Lymph node - caseation (M) e)

4. Acute inflammation

- Lobar pneumonia (M) a).
- Kidney abscess (D) b)
- Liver abscess (D) c)
- Mycetoma foot (D) d)
- Acute appendicitis (M) e)
- Purulent meningitis (M) f)
- Fibrinous pericarditis (M) g)

5. Chronic inflammation

Syphilitic aortitis (D) a)

6. Repair

Heart - healed infarct (M) a)



7. Specific inflammation

- a) Ileum typhoid (M)
- b) Amoebic colitis (M)
- c) Amoebic liver abscess (M)

8. Chronic specific granulomatous inflammation

- a) Intestine TB ulcer (M)
- b) Brain TB meningitis (M)
- c) Lymph node TB (M)
- d) Lung miliary TB (M)
- e) Fibrocaseous TB (M)

9. Pigment disorders

- a). Liver and spleen Prussian blue reaction (D)
- b). Liver and spleen malaria (M)
- c). Skin melanoma (any site) (M)

10. Disorders of vascular flow and shock

- a). Liver CPC (M)
- b). Lung CPC (M)

11. Thrombosis embolism and infarction

- a) Thrombus artery / vein (M)
- b) Infarction kidney / spleen / brain (M)
- c) Intestine gangrene (M)

12. Immunopathology

- a) Heart Rheumatic carditis (M)
- b) Kidney acute glomerulo nephritis (M)
- c) Thyroid Hashimoto's thyroiditis (D)

13. Growth disorders

- a) Heart LVH (M)
- b) Kidney atrophy and compensatory hypertrophy (M)
- c) Kidney Hydronephrosis (M)

14. Neoplasm

- a) Papilloma skin (M)
- b) Adenomatous polyp (M)
- c) Fibroadenoma breast (M)
- d) Squamous cell carcinoma skin (M)
- e) Adenocarcinoma colon (M)
- f) Metastasis lung (M)



- Leiomyoma uterus (M) g)
- Soft tissue lipoma (M) h)
- Haemangioma any site / type (M) j)
- Melanoma (M) k)
- Dermoid cyst (M) 1)
- Teratoma (M) m)

15. Alimentary System

- a) Oesophagus carcinoma (M)
- b) Stomach - chronic peptic ulcer (M)
- Perforated peptic ulcer (M) c)
- Stomach carcinoma (linitis plastica) (M) d)
- e) Intestine - TB ulcer (M)
- Colon Amoebic colitis / bacillary colitis / carcinoma ulcerative /carcinoma f) polypoidal growth (M)

16. Liver

- a) Acute diffuse necrosis (D)
- Amoebic abscess (M) b)
- Micronodular / macronodular / mixed cirrhosis (M) c)
- d) Hepatoma (M)
- Metastasis (M) e)

17. Respiratory system

- "is the suffer count Lung - lobar / bronchopneumonia (M) a)
- Bronchogenic carcinoma (M) b)
- c) Lung - abscess (D)
- d) Fibrocaseous TB (M)

18. Cardiovascular System

- Rheumatic endocarditis (D) a).
- Fibrinous pericarditis (M) b)
- Mitral stenosis (M) c)
- Aortic stenosis (M) d)
- Bacterial endocarditis (M) e)
- f) Recent myocardial infarct (D)
- Healed myocardial infarct (M) g)
- h) Atheroma aorta (M)
- Atheroma with complications (M) j)

19. Urinary System

- Flea bitten kidney (M) a)
- Large white kidney (M) b)
- Shrunken granular kidney (M) c)
- Acute pyelonephritis (M) d)
- RCC (D) e)



- f) Wilm's tumour (D)
- Papillary carcinoma Urinary bladder (D) g)

20. Male Reproductive System

- a) SCC - penis (M)
- Seminoma testis (M) b)
- Teratoma testis (M) c)
- Benign prostatic hyperplasia (M) d)

21. Female Reproductive System

- Uterus leiomyoma (M) a)
- Carcinoma cervix (D) b)
- Ovary cyst adenocarcinoma (D) c)
- d) Ovary - dermoid cyst (D)

21. Lymphoreticular System

- Lymph node TB Lymphadenitis (M) a)
- Lymph node lymphoma (M) b)
- Spleen infarct (M) c)

22. Central Nervous System

- a) Brain - purulent meningitis (M)
- Its the anker com Brain - tuberculous meningitis (M) b)
- c) Tuberculoma (D)
- Meningioma (D) d)
- Glioma (D) e)
- f) Haemorrhage - CVA (D)

23. Bone lesions

- Chronic osteomyelitis (D) a)
- Osteoclastoma (M) b)
- Osteogenic sarcoma (M) c)
- Multiple myeloma (D) d)

24. Skin lesions

- Squamous cell carcinoma (M) a)
- Basal cell carcinoma (D) b)
- Melanoma skin (any site) (M) c)

25. Diseases of Endocrine organs

- Breast fibroadenoma (M) a)
- Breast carcinoma (M) b)
- c) Thyroid - multinodular goitre (M)
- Thyroid solitary nodule / adenoma (M) d)



f. Books recommended:

- a) Text book of Pathology by Robbins
- b) Text book of General Pathology Part I & II by Bhende and Deodhare
- c) Clinical Pathology by Talib
- d) Text book of Pathology by Harsh Mohan
- e) Text book of Pathology by Muir
- f) Haematology De Gruchi
- g) IAPM text book of Pathology

Reference books:

- a) Anderson's text book of Pathology Vol I & II
- b) Oxford text book of Pathology Vol. I, II & III
- c) Pathology by Rubin and Farber
- d) Pathologic basis of Disease Robbins

5. Evaluation

a. Methods

Theory, Practicals and Viva

b. Pattern of Theory Examination including Distribution of Marks, Questions, Time.

Nature of Question Paper

- i) Total duration 4 hrs (each paper of 2 hrs or 120 minutes)
- ii) Each paper will have 3 sections.

Suggested pattern and marking for each paper of 40 marks

Sections	Nature of Questions	Total No. of Questions	Mark (s) per Question	Total Marks
A)	Multiple Choice Questions (MCQs) SBR = 28	28	1/2	14
В)	Short Answer Questions (SAQs)	6 out of 7	2	12
C)	Long Answer Question (LAQ)	2 out of 3	7	14
				40
Total				

<u>Direction:</u> Only short answer questions may be permitted from the portions marked as "Desirable to know"