SARADA KRISHNA
HOMOEOPATHIC MEDICAL COLLEGE
Kulasekharam, Kanniyakumari District, Tamil Nadu-629 161
(*Accredited by NAAC with B+ Grade & NABH*)

DEPARTMENT OF PATHOLOGY AND MICROBIOLOGY

QUESTION BANK

Prepared by

Dr.Gopika.R.S

Dr.Bindhusaran.R

Dr.Sowmya.R.S.G

GENERAL PATHOLOGY

CELL INJURY

I: Essay questions (15 marks)

1. Define gangrene . Explain the causes and pathology of each types of gangrene with examples.
2. Define Necrosis. Mention The types, explain the causes and pathology of each type of necrosis
3. Define and Classify Degeneration/ Reversible Cell Injury, Explain the Aetiopathogenesis and Pathology of each type.

II: Write short notes on (5 marks)

1. Morphological Features of fatty change in liver and heart.
2. Colliquative necrosis.
3. Dry gangrene.
4. Differences between dry and wet gangrene.
5. Dystrophic calcification.
6. Write briefly about metastatic calcification.
7. Differences between Atrophy/Hypertrophy/Hyperplasia.
8. Metaplasia.
9. Dysplasia.
10. Types of Hyaline change with examples.
11. List exogenous and endogenous pigments.
12. Caseous necrosis.
13. Morphological features of apoptosis.
14. Metastatic Calcification
15. Fat Necrosis
16. Haemosidorosis
17. Describe the Biochemical and Molecular mechanism of cell injury
18. Morphological features of Reversible and Irreversible cell injury.

III: Write short answers (2 marks)

1. Morphology of apoptotic cell
2. Pyknosis / Karyolysis/Karyorrhexis
3. Soft Granuloma

4. Hard Granuloma
5. Gummatous Necrosis
6. Psammoma Bodies
7. Mallory Bodies
8. Russell Bodies
9. Crookes Hyaline
10. Zenker's Degeneration
11. Chloasma
12. Albinism
13. Bronze's Diabetes
14. Ochronosis
15. Brown Atrophy of Heart
16. Autophage
17. Define Necrosis/Gangrene/Apoptosis

INFLAMMATION

I: Essay questions (15 marks)

1. Define Inflammation and Discuss the vascular phenomenon of Acute inflammation
2. Describe the cellular changes that takes place in Acute inflammation
3. Describe the chemical mediators of inflammation
4. Describe the mode of healing by Secondary Union
5. Describe the mode of healing by Secondary Union

II: Write short notes on (5 marks)

1. Giant cells
2. Granulomatous Inflammation
3. Healing of fractured bone and its Complications
4. Discuss the Granulomatous inflammation with example
5. Complications of wound healing

III: Write short answers (2 marks)

1. Cardinal Signs of Inflammation
2. Define Inflammation
3. Phagocytosis
4. Chemotaxis
5. Types of Acute Inflammation
6. Ulcer

7. Abscess
8. Acute Phase Proteins
9. Hypertrophic scar
10. Keloid
11. Desmoid
12. Complications of Wound Healing
13. Morphological Features of Chronic Inflammation
14. Morphological Features of Acute Inflammation
15. Granulation tissue
16. Granuloma
17. Epitheloid cells
18. Opsonins

NEOPLASIA

I: Essay questions (15 marks)

1. Define Neoplasia, Discuss the difference between benign and malignant tumours.
2. Classify carcinogens Explain the mechanism involved in tumour production by viruses
3. Define Metastsis and Discuss about the different modes of Metastasis
4. Classify Carcinogens and Describe in detail about Chemical Carcinogenesis
5. Classify Carcinogens and Describe in detail about Physical carcinogens & its Carcinogenesis

II: Write short notes on (5 marks)

1. Teratoma.
2. Difference between Carcinoma and Sarcoma
3. Anaplasia
4. Lymphatic spread of tumor
5. Grading and staging of cancer
6. Precancerous conditions
7. Biological carcinogens
8. Paraneoplastic syndrome
9. Tumor markers
10. Chemical carcinogens
11. Biopsy

III: Write short answers (2 marks)

1. Teratoma.
2. Lymphatic spread of tumour.
3. Carcinoma in situ
4. Hamartoma
5. What is Choristoma?
6. Features of Anaplasia
7. Routes of metastasis
8. Virchow's node
9. Grading of tumors
10. Four inherited cancers
11. Precancerous lesions
12. Promotors in Carcinogenesis
13. Cachexia
14. Four examples of Paraneoplastic syndrome
15. Enumerate four tumor markers giving one example of tumor associated with each.
16. Alpha fetoprotein
17. Oncogenes
18. Krukenbergs tumour

HAEMODYNAMIC DISORDERS

I: Essay questions (15 marks)

1. Define and classify thrombosis. Explain the etio pathogenesis of thrombosis.
2. Define embolism. Mention different types of emboli and describe fat embolism.
3. Define oedema, Mention the factors causing oedema, Describe the pathogenesis of Cardiac oedema
4. Define Shock, Enumerate the types of shock and discuss the pathogenesis and Morphological changes of shock

II: Write short notes on (5 marks)

1. Pathogenesis of renal edema.
2. Pathogenesis of cardiac edema.
3. Chronic venous congestion [CVC] lung.
4. Write briefly about heart failure cells.
5. Pathogenesis of septic shock.
6. Reversible shock.
7. Fat embolism.
8. Amniotic fluid embolism
9. differences between exudates and transudate
10. Air Embolism
11. Infarct – Types with Examples
12. Fate of a thrombus

III: Write short answers (2 marks)

1. Gamna Gandy Body.
2. Nutmeg Liver
3. Haematoma
4. Hyperaemia
5. Virchow's Triad
6. Decompression Sickness
7. Define Infarction
8. Saddle Emboli
9. Phlegmasia alba dolens

IMMUNOPATHOLOGY

I: Essay questions (15 marks)

1. Classify amyloidosis. Discuss its pathogenesis and characterization
2. Define hypersensitivity. Describe the mechanism of action of type II hypersensitivity
3. Define hypersensitivity. Describe the mechanism of action of type I hypersensitivity
4. Classify Immunity . Discuss in detail about innate immunity
5. Define and classify immunity, explain about acquired immunity?

II: Write short notes on (5 marks)

1. Sago spleen
2. Describe the pathogenesis of type III hypersensitivity
3. Describe the pathogenesis of type IV hypersensitivity
4. Significance of HLA complex.
5. Antigen antibody reaction
6. Active immunity
7. Etiology and pathogenesis of systemic lupus erythematosus.
8. Pathogenesis of acquired-Immuno deficiency syndrome[AIDS].

III: Write short answers (2 marks)

1. Antigen
2. Hapten
3. Graft vs host disease

4. Special stains of amyloid
5. Amyloid liver
6. Passive mmunity
7. Serum sickness
8. What is L.E cell?
9. Precursors proteins of amyloid.

ENVIRONMENTAL AND NUTRITIONAL DISEASES

II: Write short notes on (5 marks)

1. Vitamin A deficiency
2. Rickets
3. Scurvy
4. B12 deficiency
5. Pellagra
6. Contrasting features of Kwashiorkor and Marasmus

III: Write short answers (2 marks)

1. Define Obesity
2. Marasmus
3. Keratomalacia
4. Beri beri
5. Wernicke–Korsakoff syndrome

HAEMATOPOIETIC DISORDERS

I: Essay questions (15 marks)

1. Define Anaemia. Give the etiologic classification of anemias. Describe the peripheral blood smear and bone marrow picture and list the laboratory investigations in iron deficiency anaeemia.
2. Define and classify anemia. Describe the etiopathogenesis and laboratory diagnosis (blood and bone marrow picture) of megaloblastic anaemia.
3. Classify hemolytic anaemia.Describe sickle cell anaemia.
4. Classify hemolytic anaemia. Write in detail about β – thalassemia. Discuss the laboratory diagnosis of thalassemias.
5. Define and classify leukemias. Discuss peripheral blood smear, bone marrow and biochemical findings in chronic myeloid leukemia.
6. Define and classify leukemias. Describe the laboratory diagnosis of acute myeloid leukemia. Describe the bone marrow findings in AML including special stains.

7. Classify Leukemia. Write the clinical features, FAB classification and the diagnostic methods used in the diagnosis of ALL
8. Classify Lymphomas and write on Hodgkin's Lymphoma.
9. Discuss and describe the real classification of non – Hodgkins Lymphoma.

II: Write short notes on (5 marks)

1. Classification of Anaemia
2. Laboratory diagnosis of Iron deficiency Anaemia. (peripheral blood smear and bone marrow findings)
3. Sideroblastic Anaemia
4. Laboratory diagnosis of megaloblastic anaemia. (peripheral blood smear and bone marrow findings)
5. Pernicious Anaemia
6. Laboratory tests in hemolytic anaemias.
7. Sickle cell Anaemia
8. Aplastic anaemia
9. Pancytopenia
10. Hemophilia A
11. Von Willibrand's disease (clinical feature and laboratory diagnosis)
12. Disseminated intravascular coagulation (etiology and pathogenesis)
13. Hemolytic disease of newborn (Erythroblastosis fetalis)
14. Infectious mononucleosis.
15. Peripheral smear in chronic myeloid leukemia.
16. Polycythemia vera.
17. Myelodysplastic syndrome
18. Classification of Hodgkins Lymphoma.
19. Burkitt's lymphoma (morphology)
20. Multiple myeloma (laboratory findings)

III: Write short answers (2 marks)

1. What is Schilling test?
2. Myelofibrosis
3. Enumerate the causes of thrombocytosis
4. Etiopathogenesis of ITP
5. What is Christmas Disease ?
6. Blood transfusion reactions.
7. Agranulocytosis
8. Philadelphia chromosome.
9. Pathological causes of Polycythemia

10. Auer rods
11. Reticulocyte
12. Reed – Sternberg cell and its variants
13. Urinary findings in multiple myeloma
14. Bence – Jones proteins and its demonstration.
15. Paroxysmal nocturnal hemoglobinuria
16. Hereditary spherocytosis
17. Thrombocytopenia
18. Leukemoid reaction.

SYSTEMIC PATHOLOGY

RESPIRATORY SYSTEM

I: Essay questions (15 marks)

1. Classify pneumonia. Discuss in detail the etiopathogenesis, pathology and complications of lobar pneumonia.
2. What are chronic obstructive pulmonary diseases? Write the pathology, pathogenesis and morphology of emphysema lung.
3. Enumerate the chronic obstructive pulmonary disease. Classify bronchial asthma. Discuss the pathogenesis of atopic bronchial asthma. Add a note on the sputum findings in bronchial asthma.
4. Define bronchiectasis. Discuss the aetiopathogenesis, gross and microscopic pathology and complications of bronchiectasis.

II: Write short notes on (5 marks)

1. Adult respiratory distress syndrome (ARDS)
2. Bronchiectasis – etiology, pathogenesis, pathology (morphology) and complications.
3. Pneumoconiosis
4. Silicosis
5. Asbestos related diseases. (Asbestosis)
6. Etiopathogenesis of Carcinoma lung

III: Write short answers (2 marks)

1. Differences between Lobar and Bronchopneumonia**.**
2. Caplan syndrome
3. Etiology of Malignant mesothelioma

GASTROINTESTINAL SYSTEM

I: Essay questions (15 marks)

1. Define peptic ulcer. Discuss the pathogenesis and morphology of peptic ulcer
2. Describe the etiopathogenesis and morphology and gastric carcinoma.
3. Mention inflammatory diseases of large intestine. Describe etiopathogenesis and pathology of ulcerative colitis.
4. Describe the differences between Ulcerative colitis and Crohn’s disease.

II: Write short notes on (5 marks)

1. Barrett's Esophagus
2. Linitis plastic
3. Meckel's Diverticulum
4. Pathology of ileum in typhoid fever
5. Amoebic ulcer intestine – gross, microscopy and complications
6. Carcinoid tumor
7. Acute gastritis
8. Chronic gastritis

III: Write short answers (2 marks)

1. Mallory Weiss Syndrome.
2. Barrett's Esophagus/ Barret's Esophagitis
3. List complications of peptic ulcer.
4. Signet ring cell
5. What are "Skip lesions" ?
6. Typhoid Ulcer
7. Amoebic Ulcer
8. Tropical sprue
9. Acute appendicitis
10. Etiology of colorectal carcinoma

LIVER AND GALL BLADDER

I: Essay questions (15 marks)

1. Classify viral hepatitis. Describe the structure, course of disease and serological markers for hepatitis B virus.
2. Define and classify cirrhosis. Describe the morphological features (pathology) and complications of alcoholic cirrhosis
3. Describe the etiopathogenesis and pathology of alcoholic liver disease.

II: Write short notes on (5 marks)

1. Laboratory investigations in jaundice
2. Classification of Jaundice
3. Liver abscesses
4. Alcoholic cirrhosis
5. Pathogenesis of Alcoholic Liver disease
6. Hemochromatosis
7. Wilson's disease
8. Portal Hypertension

9. Hepatocellular Carcinoma (Etiopathogenesis)
10. Gallstones (Cholelithiasis)
11. Cholecystitis
12. LFT

III: Write short answers (2 marks)

1. Classification of Cirrhosis
2. Mallory bodies
3. Billiary Cirrhosis
4. What is Hemochromatosis
5. What is Hepatoblastoma
6. Types of Gallstones

PANCREAS

I: Essay questions (15 marks)

1. Describe the etiopathogenesis and pathology of various types of Diabetics mellitus

II: Write short notes on (5 marks)

1. Acute Pancreatitis – Etiopathogenesis

III: Write short answers (2 marks)

1. Acute Pancreatitis
2. Complications of Acute pancreatitis
3. Complications of Diabetics mellitus

MALE REPRODUCTIVE SYSTEM

II: Write short notes on (5 marks)

1. Prostatitis: Definition, Types
2. BPH
3. Seminoma testis
4. Difference between Seminomatous and non Seminomatous germ cell tumours

III: Write short answers (2 marks)

1. Complications of BPH

2. Prostate cancer
3. Cryptorchidism
4. Significance of PSA

FEMALE REPRODUCTIVE SYSTEM

I: Essay questions (15 marks)

1. Breast carcinoma.-morphology , aetopathogenisis and types
2. Carcinoma cervix- morphology , aetopathogenisis and types
3. Ovarian tumours- morphology , aetopathogenisis and types

II: Write short notes on (5 marks)

1. Endometriosis : Definition, Types
2. Adenomyosis
3. Hydatidiform mole
4. Leiomyoma uterus.
5. Cervical intraepithelial neoplasia.
6. Paget's disease of the breast.
7. Ovarian tumours
8. Fibroadenoma breast.
9. Teratoma of ovary
10. Dermoid cyst
11. Classification of breast cancers.
12. Carcinoma insitu conditions of breast
13. Mastitis
14. Phyllodes tumour
15. Gynecomastia

III: Write short answers (2 marks)

1. Choriocarcinoma.
2. Krukenberg tumour.
3. Vesicular mole.
4. Brenner tumour
5. Dysgerminoma
6. Meigs syndrome

THE KIDNEY AND LOWER URINARY TRACT

I: Essay questions (15 marks)

1. Discuss etiopathogenesis and morphology of Acute Glomerulonephritis
2. Describe the etiopathogenesis, gross, and microscopy Chronic pyelonephritis

II: Write short notes on (5 marks)

1. Nephrotic Syndrome
2. Definition and causes of Nephritic Syndrome
3. Goodpasture Syndrome
4. Lupus Nephritis
5. Renal changes in Diabetes mellitus
6. Pyelonephritis
7. Renal Calculi – types and pathogenesis
8. Wilm's tumor

III: Write short answers (2 marks)

1. Four causes of haematuria
2. Name renal function test
3. What is end stage kidney disease?
4. Causes of Flea bitten kidney
5. Enumerate types of renal stones
6. Staghorn Calculi
7. Wilm's Tumor (Nephroblastoma)

HEART , BLOOD VESSELS AND LYMPHATICS

I: Essay questions (15 marks)

1. Describe the etiology pathogenesis and pathology of myocardial infarction?
2. Discuss the etiopathogenesis pathology and complication of rheumatic heart disease?
3. Describe the etiology pathogenesis and pathology of valvular heart disease?

II: Write short notes on (5 marks)

1. Infective endocarditis
2. Pathology of acute MI.
3. Complications of MI.
4. Causes of left ventricular hypertrophy

III: Write short answers (2 marks)

1. Markers of MI
2. Cardiac tumours
3. Thromboangitis obliterans.
4. Raynaoud phenomenon.
5. Aneurysms of aorta.
6. Aschoff body
7. Libman-Sach's endocarditis
8. Pericarditis
9. Oslers node

SKIN & SOFT TISSUE

II: Write short notes on (5 marks)

1. .Saquamous cell carcinoma
2. .Saquamous cell papilloma
3. Malignant melanoma
4. Pigmented nevi
5. Basal cell carcinoma /rodent ulcer
6. Lipoma
7. Types of skin lesions

III: Write short answers (2 marks)

1. Hyper Keratosis
2. Keratin pearls
3. Scaling disorders

EYE, ENT AND NECK

I: Essay questions (15 marks)

1. Rhinosporidiosis
2. Leukoplakia of oral cavity – etiology, gross and microscopy.
3. Pleomorphic (salivary) adenoma.
4. Warthin's tumour (disease)
5. Tonsillitis
6. Croup

II: Write short notes on (5 marks)

1. Ocular changes in diabetes mellitus
2. Retinoblastoma
3. Nasal polyp

PARASITOLOGY

PROTOZOANS

I: Essay questions (15 marks)

1. Describe Morphology, Life cycle, Pathogenicity and Laboratory diagnosis of Entamoeba histolytica.
2. Describe Morphology, Pathogenicity and Laboratory diagnosis of Giardia lamblia
3. What are the Malarial Parasites? Explain the pathogenesis of Plasmodium falciparum.
4. Write in detail about the etiology, pathogenesis, clinical course and complications of malaria.

II: Write short notes on (5 marks)

1. Key points of Balantidium coli.
2. Chagas Disease – Explain
3. Leishmaniasis
4. Life cycle and Pathogenicity of Plasmodium falciparum.
5. Importance of Examination of Stool.
6. Etiopathogenesis of Amoebiasis
7. Life cycle and Pathogenicity of Entamoeba histolytica
8. Pathogenesis and Lab Investigations of Entamoeba histolytica
9. Amoebic Liver Abscess – Describe in Detail.
10. Methods of transmission of Infection.
11. Write in detail about the Life Cycle and Pathogenicity of Toxoplasma gondii.
12. Toxoplasmosis.
13. Leishmania donovani life cycle and laboratory diagnosis.
14. Amoebic Dysentery.
15. Zoonotic Disease.

III: Write short answers (2 marks)

1. Mention different sources of Infection
2. Describe Sleeping Sickness
3. Name the Parasites present in the stool
4. Methods of transmission of Infection.
5. Explain Reduviid bug
6. Name the parasites present in peripheral blood smear.
7. Travellers Diarrhoea
8. Romana's Sign – Describe.
9. String Test.
10. Charcot Leyden Crystals
11. Intermediate Host – Define
12. Difference between Amoebic and Bacillary dysentery
13. Lab Diagnosis of Kala azar
14. Balantidium coli.
15. Black water fever

16. NNN Medium
17. Zoonosis
18. Parasites in Peripheral Blood Smear
19. Anchovy sauce

CESTODES

I: Essay questions (15 marks)

1. Describe Morphology, Pathogenicity and Laboratory diagnosis of Taenia solium
2. Describe Morphology, Pathogenicity and Laboratory diagnosis of Taenia saginata
3. Describe the Life cycle, Pathogenesis and Lab diagnosis of Echinococcus granulosus**.**

II: Write short notes on (5 marks)

1. Hydatid Cyst and its Lab Diagnosis
2. Life cycle and Pathogenicity of Taenia solium
3. Diphyllobothrium latum

III: Write short answers (2 marks)

1. Cysticercosis – Describe
2. Cysticercus cellulosae

TREMATODES

I: Essay questions (15 marks)

1. Describe the Life cycle, Pathogenesis and Lab diagnosis of Schistosoma haematobium

II: Write short notes on (5 marks)

1. Lung fluke and its Pathogenicity
2. Blood fluke and its Pathogenicity
3. Liver fluke and its Pathogenicity

III. Write short answers (2 marks)

1. Schistosomiasis – Describe
2. Lung fluke

NEMATODES

I: Essay questions (15 marks)

1. Explain the Life Cycle, Pathogenesis, Diagnosis of HookWorm
2. Describe the Life cycle, Pathogenesis and Lab diagnosis of Ascaris lumbricoides.
3. Write the general characters of Nematodes. Describe the Life cycle, Morphology, Pathogenicity and Lab diagnosis of Ancylostoma duodenale.

II: Write short notes on (5 marks)

1. Pathogenesis of Pinworms
2. Cutaneous larval migrans.
3. Explain the Life Cycle and Pathogenicity of Wuchereria bancrofti.
4. Laboratory Diagnosis of Wuchereria bancrofti.
5. Laboratory diagnosis of Microfilaria.
6. Ascaris and its Pathogenicity.
7. Pathogenesis and Lab Investigations of Enterobiasis
8. Wuchereria bancrofti Life Cycle and Laboratory diagnosis.
9. Describe Life cycle and Pathogenicity of Ascaris lumbricoides.
10. Pathogenesis of Ancylostoma duodenale.
11. Pathogenesis of Hookworm
12. Life cycle of Enterobius vermicularis

III: Write short answers (2 marks)

1. Cyclopes – Describe
2. NIH Swab – Describe
3. Larval migrans
4. Loeffler's Syndrome