



PATHOLOGY

Paper-I

1. Cell injury
 - (a) Cause and mechanism: Ischemic, Toxic and Apoptosis
 - (b) Reversible cell injury: Types, morphology, hyaline, fatty change
 - (c) Irreversible cell injury: Types of necrosis, gangrene
 - (d) Calcification: Dystrophic and metastatic
 - (e) Extracellular accumulation: Amyloidosis, classification, pathogenesis, morphology
2. Inflammation and repair
 - (a) Acute inflammation: features, causes, vascular and cellular events.
 - (b) Morphological variant of acute inflammation
 - (c) Inflammatory cells and mediators
 - (d) Chronic inflammation: causes, types, non-specific and granulomatous with common examples
 - (e) Wound healing by primary and secondary union, factors promoting and delaying the process and complications
3. Immunopathology
 - (a) Immune pathology: organization, cells, antibodies and regulations of immune responses
 - (b) Hypersensitivity: types and examples, antibodies and cell mediated tissue injury with examples.
 - (c) Autoimmune disorders like Systemic Lupus Erythematosus
 - (d) Organ transplantation: immunological basis of rejection and graft versus host reaction
4. Infectious diseases
 - (a) Mycobacterial diseases: tuberculosis and leprosy
 - (b) Bacterial diseases: pyogenic, typhoid, diphtheria, gram –ve infections, bacillary dysentery, syphilis
 - (c) Viral: polio, herpes, rabies, measles, rickettsial, chlamydial infections
 - (d) Fungal disease and opportunistic infections
 - (e) Parasitic diseases: malaria, filaria, amoebiasis, kala azar, cysticercosis, hydatid
 - (f) AIDS: etiology, modes of transmission, pathogenesis, pathology, complications, diagnostic procedures and handling of infected materials and health education
5. Circulatory disturbances
 - (a) Oedema: pathogenesis and types
 - (b) Chronic venous congestion: lung, liver, spleen
 - (c) Thrombosis and embolism: formation, fate and effects
 - (d) Infarction: types, common sites, gangrene
 - (e) Shock: pathogenesis, types, morphological changes
6. Growth disturbances
 - (a) Atrophy, hypertrophy, hyperplasia, hypoplasia, metaplasia, malformation, agenesis, dysplasia
 - (b) Neoplasia: causes, classification, histogenesis, biological behaviour, benign and malignant, carcinoma and sarcoma
 - (c) Malignant neoplasia: grades and stages, local and distant spread
 - (d) Carcinogenesis: Environmental carcinogen, chemical, viral, occupational, hereditary and basics of molecular basis of cancer
 - (e) Tumour and host interaction: systemic effects including paraneoplastic syndrome, tumour immunology
 - (f) Laboratory diagnosis: cytology, biopsy, tumour markers
 - (g) Tumours and tumour like conditions of soft tissues
7. Miscellaneous disorders
 - (a) Autosomal and sex-linked disorders with examples
 - (b) Protein energy malnutrition and vitamin deficiency disorders
 - (c) Radiation injuries
 - (d) Disorders of pigments and mineral metabolism such as bilirubin, melanin, haemosiderin



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8. Haematopathology

- (a) Anaemia: classification and clinical features
- (b) Nutritional anaemia: Iron deficiency, folic acid/ vit B 12 deficiency anaemia including pernicious anaemia
- (c) Haemolytic anaemia: classification and investigation
- (d) Hereditary haemolytic anaemia: thalassemia, sickle cell anaemia, hereditary spherocytosis and G 6 P D deficiency
- (e) Acquired haemolytic anaemia
- (f) Aplastic anemia
- (g) Haemostatic disorders: platelet deficiency, ITP, drug induced, secondary
- (h) Coagulopathies: coagulation factor deficiency, hemophilia, DIC and anticoagulant control
- (i) Leucocytic disorders: Leucocytosis, leucopenia, leucamoid reaction
- (j) Acute and chronic leukemia: classification and diagnosis
- (k) Multiple myeloma and dysproteinemias
- (l) Blood transfusion: grouping and cross matching untoward reactions, transmissible infections including HIV and hepatitis
- (m) Haemolytic anemias: autoimmune, alloimmune, drug induced, microangiopathic and malaria
- (n) Myelodysplastic syndrome
- (o) Myeloproliferative disorders: polycythemia, myelofibrosis



PATHOLOGY

Paper-II

1. Cardiovascular pathology
 - (a) Rheumatic heart disease: pathogenesis and morphology
 - (b) Infective endocarditis: causes and pathogenesis
 - (c) Atherosclerosis and ischemic heart disease: myocardial infarction
 - (d) Hypertension and hypertensive heart disease
 - (e) Congenital heart disease: ASD, VSD, Fallot's tetralogy, Bicuspid aortic valve, PDA
 - (f) Pericarditis
 - (g) Cardiomyopathy
2. Respiratory Pathology
 - (a) Inflammatory diseases of bronchi: chronic bronchitis, bronchial asthma, bronchiectasis
 - (b) Pneumonias: lobar, broncho, interstitial
 - (c) Lung abscess: etiopathogenesis and morphology
 - (d) Pulmonary tuberculosis: primary and secondary, morphologic types including pleuritis
 - (e) Emphysema: type and pathogenesis
 - (f) Tumors: benign, malignant, squamous cell, oat cell, adeno, etiopathogenesis
 - (g) Structure of bronchial tree and alveolar walls, normal and altered lung function, concepts of obstructive and restrictive lung disorders
 - (h) Nasopharyngeal and laryngeal tumors
 - (i) Occupational lung disorders: anthracosis, silicosis, asbestosis, mesothelioma
 - (j) Atelectasis and hyaline membrane disease.
3. Urinary tract pathology
 - (a) Basics of impaired function and urinalysis
 - (b) Glomerulonephritis: classification, primary proliferative and non proliferative, secondary (SLE, polyarteritis, amyloidosis, diabetes)
 - (c) Nephrotic syndrome
 - (d) Acute renal failure: acute tubular and cortical necrosis
 - (e) Pyelonephritis, reflux nephropathy, interstitial nephritis
 - (f) Renal cell tumors: renal cell carcinoma, nephroblastoma
 - (g) Urinary bladder: cystitis, carcinoma
 - (h) Progressive renal failure and end stage renal disease
 - (i) Renal vascular disorders
 - (j) Urinary tract tuberculosis
 - (k) Nephrolithiasis and obstructive nephropathy
 - (l) Renal malformation polycystic kidney
4. Pathology of Gastrointestinal tract
 - (a) Oral pathology: leukoplakia, carcinoma oral cavity and esophagus
 - (b) Peptic ulcer: etiopathogenesis and complications, gastritis types
 - (c) Tumors of stomach: benign, polyp, leiomyoma, malignant, adenocarcinoma, lymphoma
 - (d) Inflammatory disease of small intestine: typhoid, tuberculosis, Crohn's disease, appendicitis
 - (e) Inflammatory disease of large intestine: amoebic colitis, bacillary dysentery, ulcerative colitis
 - (f) Large and small intestine tumors: polyps, carcinoid, carcinoma, lymphoma
 - (g) Pancreatitis
 - (h) Salivary gland tumors: mixed, adenoids, cystic, Warthin's
 - (i) Ischemic and pseudomembranous enterocolitis, diverticulitis
 - (j) Malabsorption-coeliac disease, tropical sprue and other causes
 - (k) Pancreatic tumors: endocrine, exocrine and periampullary
 - (l) Liver and Biliary tract pathology
 - (a) Jaundice: types, pathogenesis and differentiation
 - (b) Hepatitis: acute and chronic, etiology, pathogenesis and pathology
 - (c) Cirrhosis: etiology, classification, pathology, complications
 - (d) Portal hypertension: types and manifestation
 - (e) Diseases of gall bladder: cholecystitis, cholelithiasis, carcinoma
 - (f) Tumors of liver: hepatocellular, metastatic, tumor markers
5. Lymphoreticular system
 - (a) Lymphadenitis: non-specific, granulomatous
 - (b) Hodgkin's and Non-Hodgkin's lymphoma, classification, morphology
 - (c) Diseases of spleen: splenomegaly and effects
6. Reproductive system
 - (a) Diseases of cervix: cervicitis, cervical carcinoma, etiology, cytological diagnosis
 - (b) Hormonal influences and histological appearances of different phases of menstrual cycles and the abnormality associated with it



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- (c) Diseases of uterus: endometrial hyperplasia and carcinoma, adenomyosis, smooth muscle tumours
 - (d) Trophoblastic diseases: hydatidiform, choriocarcinoma
 - (e) Diseases of breast: mastitis, abscess, fibrocystic disease, neoplastic lesions, fibroadenoma, carcinoma, phylloides tumors
 - (f) Prostate: nodular hyperplasia, carcinoma
 - (g) Ovarian and testicular tumours
 - (h) Carcinoma of penis
 - (i) Pelvic inflammatory disease including salpingitis
 - (j) Genital tuberculosis
7. Osteopathology
- (a) Osteomyelitis: acute, chronic, tuberculosis
 - (b) Metabolic diseases: rickets/osteomalacia, osteoporosis, hyper parathyroidism
 - (c) Tumors: primary, osteosarcoma, osteoclastoma, Ewing's sarcoma, chondro sarcoma,
 - (d) metastatic
 - (e) Arthritis: rheumatoid, osteoid and tuberculosis
 - (f) Healing of fractures
8. Endocrine pathology
- (a) Diabetes mellitus: types, pathogenesis, pathology
 - (b) Non neoplastic lesion of thyroid: Iodine deficiency goiter, autoimmune thyroiditis,
 - (c) thyrotoxicosis, myxoedema
 - (d) Tumors of thyroid: adenoma, carcinoma: papillary, follicular, medullary, anaplastic
 - (e) Adrenal disease: cortical hyperplasia, atrophy, tuberculosis, tumors of cortex and medulla
 - (f) Parathyroid hyperplasia and tumors
9. Neuropathology
- (a) Inflammatory disorders: pyogenic and tuberculous meningitis, brain abscess, tuberculoma
 - (b) CNS tumors-primary glioma and meningioma and metastatic
 - (c) CSF and its disturbances: cerebral oedema, raised intracranial pressure
 - (d) Cerebrovascular disease: atherosclerosis, thrombosis, embolism, aneurysm, hypoxia, infarction and hemorrhage
10. Dermatopathology
11. Skin tumors: squamous cell, basal cell and melanoma



MICROBIOLOGY

Paper-I

1. General Microbiology:

- (a) General concepts of infectious diseases prevalent in India (morbidity, mortality data).
- (b) Significant milestones in history of infectious diseases.
- (c) Definitions pertaining to infectious diseases.(eg: host, parasite, endogenous, exogenous, transmission, routes, source, reservoir etc).
- (d) Classification of microbes from clinical view point.
- (e) Normal human microbial flora of and its importance in health and disease.
- (f) Bacterial cell: anatomy, physiology and genetics.
- (g) Sterilization, disinfections and standard precautions in patient care and disease prevention.
- (h) Antimicrobials: mode of action, testing, interpretation of results and rational use, mechanism of resistance.

2. Immunology:

- (a) Immune apparatus, lymphoid organs, Immunobiology
- (b) Antigen and antibody.
- (c) Ag+Ab –reactions, serology.
- (d) Cell and humoral immunity in health and disease.
- (e) Hypersensitivity.
- (f) Tumor immunity/transplantation and auto-immunity.

3. Systematic Bacteriology:

- (a) Gram Positive/Negative Cocci /Bacilli associated with human infections.
 - (i) Vibrio, Campylobacter, Helicobacter
 - (ii) Mycobacteria,
 - (iii) Anaerobic bacteria
 - (iv) Spirochaetes
 - (v) Chlamydia, Rickettsia, Mycoplasma
 - (vi) Miscellaneous bacteria of clinical importance.
 - (vii) Legionella, Listeria etc.



MICROBIOLOGY

Paper-II

1. Virology:
 - (a) General properties, structure, replication, classifications.
 - (b) Antiviral agents.
 - (c) General concepts in laboratory diagnosis of viral infections.
 - (d) Herpes, Adeno, Arbo, Picorna, Orthomyxo, Paramyxo, Rabies, HIV, Hepatitis,
 - (e) Miscellaneous virus of medical importance: (Rota, Corona, etc)
 - (f) Viral vaccines.
 - (g) Pox, slow and oncogenic.
2. Parasitology:
 - (a) General concepts and definition of key terms, infections of national prevalence.
 - (b) Protozoal infections prevalent in India:
 - (i) Intestinal
 - (ii) Blood
 - (iii) Genital
 - (c) Helminths (Intestinal and tissue) prevalent in India.
 - (i) Cestodes
 - (ii) Nematodes
 - (iii) Trematodes
3. Mycology:
 - (a) General properties and classification of fungal diseases, approach to laboratory diagnosis (sample collection, identification), antifungal agents.
4. Applied Microbiology:
 - (a) CNS Infections: Acute and chronic meningitis, encephalitis and brain abscess.
 - (b) PUO/FUO: Infective and non infective causes and approach to diagnosis.
 - (c) Diarrhoeal diseases (including food poisoning)
 - (d) Respiratory Tract Infection (Upper & Lower)
 - (e) UTI
 - (f) Wound infection
 - (g) Skin and soft tissue infections
 - (h) Eye and ear infections
 - (i) Sexually transmitted Infections
 - (j) Female genital tract infections
 - (k) Infections in immuno-compromised individuals
 - (l) Bone and Joint infections
 - (m) Hospital Associated Infections and its prevention.
 - (n) Zoonotic diseases.
 - (o) National Programmes of Communicable Diseases.
 - (p) Investigation of outbreaks and notification.



PHARMACOLOGY

Paper-I

1. General Pharmacology
 - (a) Pharmacology: Definition, scope, various branches
 - (b) General principles and mechanism of drug action
 - (c) Concept of therapeutic Index and margin of safety
 - (d) Drug nomenclature
 - (e) Molecular mechanism of drug action
2. Clinical Pharmacology – Basic Concepts
 - (a) Scope and relevance of clinical pharmacology
 - (b) Routes of administration of drugs, drug delivery system
 - (c) Pharmacokinetics – Absorption, Distribution, Metabolism, Excretion
 - (d) Bioavailability and bioequivalence
 - (e) Factors modifying drug action and drug dosage
 - (f) Drug interactions Pharmacogenomics
 - (g) Adverse Drug Reactions, Pharmacovigilance,
 - (h) Therapeutic drug monitoring & Adherence
 - (i) Essential drugs and fixed dose drug combinations, Pharmacoeconomics, Drug Regulation &
 - (j) Drug Acts, Legal aspects, Inventory Control
3. Autonomic Pharmacology
 - (a) General principles of autonomic neurotransmission
 - (b) Cholinergic and anticholinergic drugs
 - (c) Adrenergic drugs and antiadrenergic drugs
 - (d) Skeletal muscle relaxants Cardiovascular system
 - (e) Antihypertensive drugs, their mechanism of action, adverse drug reactions, drug interactions and basis of combining commonly used drugs.
 - (f) Pharmacology of calcium channel blockers.
 - (g) Drugs affecting Renin Angiotensin system.
 - (h) Approaches to treatment of myocardial Infarction Drugs used in treatment of angina pectoris.
 - (i) Drug treatment of peripheral vascular diseases
 - (j) Pharmacology of vasodilators and cardiac glycosides; usage in CHF
 - (k) Treatment of paroxysmal supraventricular tachycardia, Atrial dysrhythmias, sudden cardiac arrest and ventricular fibrillation.
4. Respiratory system
 - (a) Drugs used in the treatment of bronchial asthma, mechanism of action, common side effects and precautions to be taken during their use.
 - (b) Antitussives: pharmacological actions, indications, contraindications and common side effects.
 - (c) Expectorants and mucolytic agents: mechanism of actions, side effects, and precautions to be taken.
5. Drugs affecting blood and blood formation
 - (a) Anti-anaemic drugs : Mechanisms of iron absorption from GIT and factors modifying it,
 - (b) Adverse drug reactions, oral and parenteral preparations, treatment of iron deficiency anaemia
 - (c) Pharmacology of folic acid, vitamin B12, vitamin K, erythropoietin.
 - (d) Anticoagulants: Mechanisms of action of heparin and oral anticoagulants, indications, monitoring of therapy and the treatment of bleeding due to their overdose, drug interactions.
 - (e) Drugs inhibiting platelet aggregations, their indications and precautions for their use.
 - (f) Properties and indications for the use of plasma expanders.
 - (g) Fibrinolytics and anti fibrinolytics; Indications, adverse reactions.
 - (h) Hypolipoproteinemia drugs: Mechanism of actions, adverse drug reaction and indications.
6. Diuretics
 - (a) Diuretics: mechanism of action, pattern of electrolyte excretion under their influence.
 - (b) Short term side effects and long term complications of diuretic therapy.
 - (c) Therapeutic uses of diuretics.



7. Chemotherapy

- (a) General principles of chemotherapy, rational use of antimicrobial agents, indications for prophylactic and combined uses of antimicrobials.
- (b) Chemotherapeutic agents: penicillins, cephalosporins, aminoglycosides, broad spectrum antimicrobial agents, quinolones, sulphonamides and other newer drugs; their mechanism of actions, side effects, indications, resistance, drug interactions.
- (c) Antiseptics, disinfectants and their use based on their pharmacological properties.
- (d) Anticancer drugs, mechanism of actions, indications, side effects, contraindications, precautions.

Clinical Pharmacology and Therapeutics

1. National Health programmes like:

- (a) Tuberculosis
- (b) Leprosy
- (c) HIV and STD
- (d) Malaria
- (e) Syphilis and gonorrhea
- (f) RCH programme
- (g) Upper and lower respiratory infections
- (h) Diarrhoea
- (i) OCP
- (j) Filariasis
- (k) Anaemia
- (l) Diabetes Mellitus

2. Infective/Parasitic conditions

- (a) Influenza
- (b) Urinary Tract infections
- (c) Typhoid and other GIT infections
- (d) Amoebiasis
- (e) Worm infestations
- (f) Fungal Infections

3. Other common conditions

- (a) Hypertension
- (b) Angina Pectoris
- (c) Myocardial Infarction
- (d) Congestive Cardiac Failure
- (e) Shock and other emergencies
- (f) Hyperlipidemia
- (g) Osteoporosis
- (h) Epilepsy
- (i) Parkinsonism
- (j) Asthma and COPD
- (k) Osteoarthritis and gout
- (l) Rheumatoid arthritis

4. Other topics:

- (a) Treatment of pain
- (b) Treatment of insomnia
- (c) Treatment of cough
- (d) Treatment of fever of unknown origin (PUO)
- (e) Drugs used in labour
- (f) IV fluids
- (g) Clinical uses of glucocorticoids
- (h) P-drug or how to select a drug for a given patient in a given situation
- (i) Essential drugs
- (j) Drug therapy in special situations (pregnancy, lactation, children, geriatrics, renal and hepatic diseases).



PHARMACOLOGY

Paper-II

1. Antacids and related drugs
 - (a) Histamine receptor antagonists, their pharmacological actions, indications, adverse effects and precautions.
 - (b) Pharmacology of drugs acting on prostaglandins, 5-HT receptors and leukotrienes.
2. Central Nervous System, Psychopharmacology, Drugs used in Anaesthetic practice
 - (a) Drugs used in epilepsy, selection of appropriate drug for various types of epilepsy and adverse effects of drugs.
 - (b) Hypnotics used currently in clinical practice, indications, contraindications, adverse effects, drug interactions.
 - (c) Opioid and analgesics; Pharmacological actions, indications, contraindications, adverse effects and drug interactions of commonly used analgesics.
 - (d) Non-steroidal anti-inflammatory drugs (NSAIDs): Pharmacological actions, indications, contraindications, adverse effects and drug interactions of commonly used drugs.
 - (e) Drugs used in the treatment of Parkinson's disease: anticholinergic agents, dopamine agonists,
 - (f) MOAI, COMTI; their indications, contra-indications, adverse effects and drug interactions.
 - (g) Disease modifying agents in the treatment of rheumatoid arthritis.
 - (h) Pharmacology of ethanol and methanol poisoning.
 - (i) Agents used in the treatment of gout (acute and chronic).
 - (j) Drugs used for psychosis, anxiety, depression, and manic depressive illness.
 - (k) Drugs of addiction/abuse and dependence.
 - (l) General anaesthetics; Cardinal features, merits and demerits of commonly used anaesthetics, drug interactions.
 - (m) Pre-anaesthetic adjuvants: uses, indications, contraindications, adverse effects and drug interactions.
 - (n) Local Anaesthetic agents: Pharmacological basis, adverse drug reactions, Indications and complications of spinal anaesthesia.
 - (o) Neuroleptanalgesia, Disassociative anaesthesia.
 - (p) (Endogenous opioid peptides, and their functions, opioid receptors and their subtypes; Centrally acting muscle relaxants).
3. Gastro-intestinal system
 - (a) Pharmacotherapy of peptic ulcer, mechanism of actions, adverse drug reactions, contraindications and precautions.
 - (b) Antiemetic agents: mechanism of actions, uses, side effects.
 - (c) Pharmacological basis of use of drugs in diarrhea.
 - (d) Drugs used in ulcerative colitis.
4. Drugs acting on Endocrine System
 - (a) Thyroid hormones and antithyroid drugs: Pharmacological actions, indications, contraindications and side effects.
 - (b) Drugs used for pharmacotherapy of diabetes mellitus, mechanism of actions, contraindications, precautions during the use and side effects. Management of iatrogenic hypoglycemia and diabetic ketoacidosis.
 - (c) Sex hormones, their analogues and antagonists, uses in replacements and pharmacotherapy, outlining the rationale for such use, contraindications and side effects.
 - (d) Pharmacological approaches to contraception, side effects and precautions during use and contraindications.
 - (e) Uterine relaxants, and uterine stimulants, indications, side effects, contraindications.
 - (f) Hormones of adrenal cortex, their synthetic analogues, pharmacological actions, therapeutic uses, precautions, side effects and contraindications.
 - (g) Hormones and drugs affecting calcium metabolism, therapeutic indications, contraindications and side effects.
 - (h) Drugs used in the treatment of infertility.



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5. Toxicology

- (a) General principles of treatment of poisoning including snake bite.
- (b) Heavy metal poisoning and heavy metal antagonists.
- (c) Management of overdosage with commonly used therapeutic agents.

6. Miscellaneous

- (a) Vaccines, Drugs modulating Immune system.
- (b) Vitamins.



FORENSIC MEDICINE

1. Definition of Forensic Medicine and Medical Jurisprudence.
2. Courts in India and their powers: Supreme Court, High Court, Sessions Court, Additional Sessions Court, Magistrate's Courts.
3. Court procedures: Summons, conduct money, oath, affirmation, perjury, types of witnesses, recording of evidence, conduct of doctor in witness box.
4. Medical certification and medico-legal reports including dying declaration.
5. Death :
 - (a) Definition, types; somatic, cellular and brain – death.
 - (b) Natural and unnatural deaths.
 - (c) Suspended animation.
6. Change after death :
 - (a) Cooling of body, lividity, rigor mortis, cadaveric spasm, cold stiffening and heat stiffening.
 - (b) Putrefaction, mummification, adipocere and maceration.
 - (c) Estimation of time of death.
7. Inquest: Inquest by police, magistrate.
8. Identification:
 - (a) Definition
 - (b) Identification of unknown person, dead bodies and remains of a person by age, sex, stature, dental examination, scars, moles, tattoos, dactylography, DNA typing and personal belonging including photographs.
9. Exhumation.
10. Medico-legal autopsies:
 - (a) Definitions of medico-legal and clinical/pathological autopsies.
 - (b) Objectives, procedures, formalities of medico-legal autopsies.
 - (c) Preservation of articles of importance, during autopsy.
 - (d) Preservation of body fluids & viscera in suspected poisoning.
11. Mechanical injuries or wounds:
 - (a) Definition, classification of mechanical injuries; description of blunt force, sharp force and firearm injuries.
 - (b) Medico-legal aspects of injuries, differences between antemortem and post-mortem injuries, estimation of age of different types of injuries, defence injuries, hesitation cuts; fabricated injuries; simple and grievous hurt, suicidal/ accidental/homicidal injuries; causes of death by mechanical injuries.
12. Regional injuries: Injuries to Head, Neck, Thorax, Abdomen, Pelvis, Genitalia, Vertebral column and Bones.
13. Injuries due to physical agents, and their medico-legal importance; cold, heat, electricity and lightning, explosions and radioactive substances.
14. Asphyxial deaths: Definition, causes, types, post-mortem appearances and medico-legal significance of hanging, strangulation, suffocation and drowning.
15. Deaths due to starvation.
16. Sexual Offences: Virginity, rape, unnatural sexual offences; sexual perversions.
17. Criminal abortion, Medical Termination of Pregnancy Act, 1971.
18. Infant and childhood deaths: Viability, determination of age of foetus, live birth, still birth and dead born child, sudden infant death syndrome, child abuse, medico-legal aspects of precipitate labour.
19. Biological fluids:
 - (a) Blood – Preservation, dispatch of samples, importance of blood group in disputed paternity, hazards of blood transfusion.
 - (b) Seminal stains – Preservation and dispatch of samples.
20. FORENSIC PSYCHIATRY
 - (a) Definition and brief overview of common mental illnesses.
 - (b) True and feigned mental illness.
 - (c) Civil and criminal responsibilities of a mentally ill person.
 - (d) Indian Mental Health Act, 1987 with special reference to admission, care and discharge of a mentally ill person.



21. MEDICAL JURISPRUDENCE

- (a) Indian Medical Council and State Medical Councils; their functions and disciplinary control.
- (b) Rights and privileges and duties of a registered medical practitioner, Disciplinary proceedings and penal erasure.
- (c) Professional conduct, Etiquette and Ethics in medical practice.
- (d) Professional secrecy, privileged communication.
- (e) Medical Negligence: civil and criminal negligence, contributory negligence, vicarious liability, res ipsa loquitur, prevention of medical negligence and defences in medical negligence suits.
- (f) Consent: Types, informed consent, age in relation to consent, consent in relation to mental illness and alcohol intoxication, emergency and consent.
- (g) The Pre-natal Diagnostic Techniques Act (Prohibition of sex selection).
- (h) Human Organ Transplant Act, 1994.
- (i) Consumer Protection Act, 1994.
- (j) Certification of births, deaths, illness and fitness.

22. TOXICOLOGY

General aspects of poisoning:

- (a) Duties of doctor in cases of poisoning, medico-legal autopsy in poisoning, preservation and dispatch of viscera for chemical analysis. Role of Forensic Science Laboratory in brief.

Types of poisons, diagnosis, principles of therapy and medicolegal aspects of :

- (a) Corrosive poisons: strong mineral acids and organic acids.
- (b) Metallic poisons: Lead, Arsenic, Mercury and Copper.
- (c) Animal poisons : Snake and scorpion bites.
- (d) Deliriant: Dhatura, Cannabis and Cocaine.
- (e) Somniferous agents: Opium, Morphine and other opioids.
- (f) Inebriants : Methyl and ethyl alcohol.
- (g) Asphyxiant poisons: Carbon monoxide, Carbon dioxide, Methane and cyanides.
- (h) Anesthetic agents.
- (i) Cardiac poisons: Cerebra thevetia and Nerium odorum.
- (j) Miscellaneous: Aspirin, paracetamol, barbiturates, diazepam, antihistaminics, antidepressants and kerosene oil.
- (k) Insecticides: Organophosphorus compounds, Carbamates and Organochloro compounds.
- (l) Food poisoning.
- (m) Drug abuse and dependence.

23. Desirable to know following poisonings:

- (a) Inorganic non metallic poisons: Phosphorous.
- (b) Organic vegetable irritants: Abrus precatorious, Capsicum, Calotropis, Semicarpus anacardium, Croton.
- (c) Cardiac Poisons: Aconite,
- (d) Convulsants: Strychnine.
- (e) Paralytic agents, Curare.
- (f) War gases and Industrial gases.
- (g) Chloral hydrate.
- (h) Mechanical poisons.
