

1. **Anatomy :**

* Gross Anatomy of the: Hip joint, Shoulder joint, Heart, Lungs, Spleen, Kidneys, Uterus, ovaries, Coronary Circulation, Thyroid, Pancreas * Gross Anatomy of carotid-vertebral system * Gross anatomy of Thalamus and internal capsule

2. **Physiology and Biochemistry :**

* Neurophysiology of sensory receptors, reticular formation, cerebellum and basal Ganglia. * Regulation of function of male and female gonads, including physiology of lactation and menstruation. * Mechanical and electrical properties of the heart, ECG, Cardiac cycle. * Regulation of cardiovascular function, Regulation of respiration. * Absorption, Digestion, Metabolism of fats, carbohydrate and protein. * Renal Function Tests. * Urine Examination, Stool examination

3. **Pathology and Microbiology :**

* Principles of Inflammation. * Principles of Carcinogenesis and Tumor spread. * Markers in infective Hepatitis. * Pathogenesis of Tuberculosis. * Diagnosis of Tuberculosis. * Immune system. * Lifecycle and laboratory diagnosis Entamoeba, malaria. * Culture media-types and uses. * Immunity and immunology. * Sterilisation and disinfection. * Bio-medical waste-sources, health hazards, methods of collection and disposal of it. Collection, storage and onward transmission of biological samples for laboratory procedures. * Common epidemic causing organisms and methods of epidemic investigation. * Examination of Urine for albumin and sugar. * Examination of stool for ova and cyst of common helminths. * Examination of blood for Haemoglobin, Bleeding time and clotting time, E.S.R., peripheral blood smear for Malaria parasites and haematology.

4. **Forensic Medicine :**

* Forensic Examination of Injuries and Wounds. * Postmortem Examination of Homicidal Case

5. **Medicine-Psychiatry-Skin Diseases :**

* Common Symptoms and Signs. * Fevers, Seizures, Breathlessness (Dyspnoea), Palpitation, Vomiting, Diarrhoea, Chest Pain, Headache, Clubbing, Koilonychia, Cyanosis, Anemia, Shock (Types-Clinical Features etc.) * Angina Pectoris, myocardial Infarction (Etiopathology, clinical features, investigations, complications and management). * Preventive prophylaxis against Rheumatic fever and Infective Endocarditis. * Hypertension (Etiopathology, Clinical features, investigations, complications and management) * Bronchial Asthma (Etiopathology-Clinical Features-Investigations-Complication-management) * Status Asthmaticus (Definition-Clinical Features-Management) * Community Acquired Pneumonia (Common Pathogens-Clinical Features- Complications-Management) * Chronic obstructive Lung Diseases (Etiopathology- Clinical Features - Complications - Management) * Acid Peptic Disease

* Infective Hepatitis (Etiopathology-Virology-Clinical Features-complications Diagnosis - Management) * Prevention of Transmission of Hepatitis B * Cirrhosis of Liver * Coma (causes-Approach-investigation-Management) * Normal CSF Picture and CSF Picture in various Diseases * Cerebra Vascular stroke (Etiopathology-Clinical Presentation-Approach-investigation-Management) * Bell' Palsy * Anxiety Neurosis * Alcoholism and Drug Addiction * Depressive Disorder * Schizophrenia * Syphilis, Gonorrhoea * Pediculosis * Leprosy * General Principles of Management of Poisoning. * Common infections caused by Bacteria-Parasites-Viruses-Fungus etc. Streptococcal infection, * Typhoid fever-Food Poisoning-Tetanus-Cholera-Malaria-Desentry-HIV infection-Tuberculosis * Acute Glomerulonephritis * Acute renal failure * Chronic Renal Failure * Diabetes Mellitus (Etiopathophysiology-Clinical Features-Investigation-Management-Complications). * Hyperthyroidism-Thyrotoxicosis * Hypothyroidism * Iron Deficiency Anemia (Etiopathophysiology- Clinical features-investigation-Management) P/S of Iron Deficiency Anemia & Megaloblastic Anemia. * Paediatrics * Growth and Development * Growth chart * Assessment of Individual Child * Breastfeeding * Normal Nutrition * Immunizations programmes * Diarrhoeal Diseases in Children, Diagnosis-Management of dehydration-Oral, Dehydration solution * Protein Caloric Malnutrition, Marasmus, Kwashiorkor

6. **Preventive and Social Medicine (Community Medicine) :**

* Concept of health and disease-definition of health and disease, determinants of health, indicators for measuring community health. * Nutrition and health-energy, protein and nutrients requirements for various groups (age, sex and occupation), National Nutritional Programmes in India, concept of balanced diet. * Environment and health-effects of poor environment on health-especially in relation to water, air and community waste.*Principles, uses and methods in Epidemiology. *Disease transmission, general methods of control and prevention of diseases.* Maternal and child health-problem and preventive and welfare programmes.* Immunity and immunising agents.* Health care delivery organisation-State, district and peripheral, Governmental and non Governmental.* Demography and family welfare programme in India * National Health Programmes. * Family planning methods. * Delivery of RCH

7. **Surgery and Allied Branches :**

* First aids, Management of injured Patient * Resuscitation of severely injured patients * Process of fracture healing and management of Fracture * Principles of Critical Care Patient Management * Clinical Manifestation-investigation-Management of: • Hernia • Hydrocele • Appendicitis • Lump in Breast • Piles • Acute Burns • Burger's disease • Benign Prostatic Hypertrophy * Clinical Manifestations - investigation and Management (Surgical Principles)of: • Intestinal Obstruction • Acute Urinary Retention • Spinal injury • Hemorrhagic Shock • Pneumothorax.