

MEDICAL SCIENCE (PRE)

Human Anatomy :

General Principles and basic structural concept of gross anatomy of hipjoint, hearts, stomach, lungs, spleen, kidneys, uterus, ovary and adrenal glands.

Histological features of parotid gland, bronchi, testis, skin, bone and thyroid gland, Gross anatomy of thalamus, internal capsule, cerebrum, including their blood supply; functional localisation in cerebral cortex, cerebellum, spinal cord, eye, ear, throat, cranial nerves.

Human physiology and biochemistry :

Sensory receptors, reticular of function, cerebellum and basal ganglia.

Reproduction : Regulation of function of male and female gonads.

Cardiovascular system : Mechanical and electrical properties of heart including ECG : regulation of cardiovascular functions.

GI system : Bilirubin metabolism, liver function tests.

Haematology : Haemoglobin synthesis, abnormal haemoglobins.

Respiration : Regulation of respiration, digestion and absorption of fats, metabolism of carbohydrates.

Renal Physiology : Tubular function, regulation of PH.

Nucleic acids : RNA, DNA, genetic code and protein synthesis.

Pathology and Microbiology : Principles of inflammation, principles of carcinogenesis and tumour spread, coronary heart disease, infective diseases of liver and gall bladder, pathogenesis of tuberculosis. Immune system, immunological and serological tests for collagen vascular disease.

Etiology and laboratory diagnosis of diseases caused by Salmonella Vibrio Meningococcus and hepatitis virus.

Life cycle and laboratory diagnosis of Entamoeba histolytica, malarial parasite, round worm and hook worm.

Medicine :

Protein energy malnutrition. Medical management of Coma, cerebro vascular accidents, status asthmaticus, cardio pulmonary arrest, status epilepticus, acute renal failure.

Clinical features, etiology and treatment of : Coronary heart disease, rheumatic heart disease, pneumonia, cirrhosis of liver, amoebic liver abscess, peptic ulcer, pyelonephritis leprosy, rheumatoid arthritis, diabetes mellitus, poliomyelitis meningitis, schizophrenia, STD, AIDS.

Surgery :

Principles of surgical management of severely injured and process of fracture healing. Malignant tumours of stomach and their surgical management, Signs, symptoms, investigation and management of fractures of femur, principles of pre-operative and post-operative care.

Clinical manifestations, investigations and management of Hydrocephalus, Buerger's disease, appendicitis, benign prostatic hypertrophy, bronchogenic carcinoma, carcinoma breast, carcinoma, colon. Clinical manifestation, investigations and surgical management of :

Intestinal obstruction, acute urinary retention, spinal injury, hemorrhagic shock, pneumothorax haematemesis.

Preventive and Social Medicine :

Principles of epidemiology, health care delivery.

Concept and general principles of prevention of disease and promotion of health. National health programs, effects of environmental pollution on health, concept of balanced diet family planning methods.