2nd year (Part - I)

Syllabus

THAKUR SUKDEV BRAHMACHARI

BIOCHEMIC MEDICAL COLLEGE & HOSPITAL

ADDRESS: ANANDALOK, POLICEPARA, GARIA, KOLKATA-700152, LANDMARK: NSEC COLLEGE

2nd YEAR D.M.B.S (Diploma) COURSE
Study & Examination
ANATOMY

ANGIOLOGY

Theoretical Part :

Outlines of circulation of Blood.

Structures of – Arteries, Veins, Capillaries, Thorasic Artery, Pericardium, Heart Foetal and Cardiac Circulation.

Arteries – Head and Neck.

Common Carotid Artery, External Carotid Artery.

Internal Carotid Artery, Arteries of the Brain.

Arteries of the upper extremities subclavian artery.

Amillary artery Bronchial artery, Cabital artery.

Arteries of the Trunk.

Thorasic Aorta, abdominal Aorta, Commoniliac artery.

External Iliac Artery.

Arteries of the Lower Extremities.

Femoral Artery, Femoral sheath.

Abductor canal, Femoral Triangle.

Poplital Fossa, Poplital artery.

Arteriod Titeial Artery.

Amteria dorsalis, pedise Braches.

VEINS :

Pulmonary, Heart, Head and Neck, Face, Brain, Upper Extrimities and thorasic (Dupanil superficial). Vertebral Column Lower Extremity, Abdomen and Pelvis, Vesical Plexgn, Vaginal Plexus Inferior venacova, Superior Venacova, Portal system of vein.

LYMPHATIC SYSTEM

Lympatic Vessel, Lymphatic Glands.

Lymphatic duct, Right lymphatic duct.

Lympatic glands of the Head and Neck.

Lympatic Vessel of the Head and Neck.

Lymphatic glands of the upper Extrimity.

Lymphatic Vessle of the Upper Extremity.

Lymphatic glands of the Lower Extremity.
Lymphatic vessel of the lower Extrimity.
Lymphatic glands and vessel of the Abdomen pelvis.
Parital lymph of glands and vessel.
Visceral lymph of glands and vessel.
Lymphatic vessels of the sub. diphragatic portion of the digestive tube.
Lymphatic system of the spleen, suprarenal gland.
Lymphatic vessels of the Urinary system.
Lymphatic vessels of the Reproductive system.
Lymph glands and vessels of the thorax.
Parietal lymph glands and vessels.
Lymphatic vessels of the thorax.
Lymphatic vessels of the thorasic wall and viscera.

NEUROLOGY

General description of the nervous system.
Structure and Function of the periferal nervous and gangila.
The medula spinalis.
A short description of the Brain.
The menings and medula spinulis cranial.
Nervous, Spinal Nerves, Sympathetic Nervous system.
The Organ of the senses and common integument.

MYOLOGY

General description of muscles, Tendons Aponerosis Fascicle muscies of the Scalp Yelids, Muscles of Nose, Mouth, Lateral Vertebral Column muscles. Arterior Muscles. Muscles of the thorax, Abdomen, Pelvis, Perinium and oral region. Muscles of the upper and lower Extrimity.

EMBRYOLOGY

Ovum, Maturation of the Ovum Fertilisation of Ovum, Spermatorrhoe Formation of Embryo and different stages of its growth.

Practical Part :

A course of discussion of the Human Body. Arrangements should be made to have discussion parts for the students. Parts should be allotted to student and the discussion of parts shall

be recorded as complete. The period of at least 4 months.

Regular attendance of all the students :

A course of practical demonstration on surface marking of :

Important viscera, Arteries, Nervous vains, Regions of Clinical importance of the Brain, Bony hand - marks.

The written papers in Anatomy shall be distributed as follows :

Paper - I Upper Extremity.
Head, Face, Neck and Brain.

Paper - II Lower Extremity.
Thorax, Abdomen and pelvis.

PHYSIOLOGY

Practical Part :

Excretion :

Kidney :

Histological structure and Function. Histology and Function of Nephron and Renal Tubulers.

Renal Circulation :

Peculiarities of Renal Circulation. Normal Renal Blood Flow

Urine :

Volume, Characteristic, Composition, Factors-Affecting formation of Urine, Reaction of Urine, Glycosuria, Factors, Controlin Volume of Urine, Nerve Supply of Bladder on Urethra, Mechanism of Micturition & Mechanism of felling Bladder.

Cutaneous System :

Astitological structure and function of the skin, glands in the skin, pigmentation of the skin.

Sweat glands :

Structure, Function and Composition, Mechanism of the Sweating Secretion.

Temparature :

Normal Temparature of the Body, Factors affecting of the body Temparature. Regulation of the Body Temparature.

Endocrines System :

Introduction of the Endocrinology.

Hormone – Their sources and Function.

G.H. or S.T.H., T.S.H., A.O.T.H., G.T.H., L.H., F.S.H., or A.C.S.H.

Protectine, Hypotrapin, Pitocine, Vesoprassin, Thyroid

The dectlesss glands :

Structure and Function, Insuline, Glucagon. Regulation of Blood, Sugar Level, diabetis melitis

Adrenal Cortex :

Structure, Function and active principal

Nerves System :

Introduction of the Neurology, Classification, Central or Somatic Nerves System, Subdivission of Nerves System.

The Special Senses :

Introduction :

Taste – Nerves of Tastes, affectory Nerves Sence of Small. Structure and functions of different part of eye-ball, vision formation of ratinal image. Mechanism of accomodation common errors of refraction.

Hearing – Structure and Functions of External middle and internal ear.

Gonads and Reproductive System :

Male Reproductive Organs

Testis, Supermatozoa

Female Reproductive Organs

Overy and its function

Mammary glands and its function. Uterus and its Function. Ovulation, Fertilisation, Implantation, Control of Ovulation Puberty, Androgen, Ostragen, Function, Progestaron Function Relasis.

Mensturation – Mechanism, Phases and Cycle

Pregnancy :

Birth Control and Contraception

Duetless glands in connection with Re-production

Function of the corpus luleum

Daily diet chart and required foods and callories

Practical Part :

Identification of histological specimens of tissues and organs, Bones, Cartilage, Fibrous Tissue, Cellular Tissue, Veins Arteries, Liver, Lungs, Appendix, Falliopian Tube, Cons section of spinal nerve, Lymph glands spleem, Kidney Preparation and staining of blood films total and differential count of blood cells.

Use of the haemoglobin nometes and Sphygmomanometer, Demonstration of some experiments in connection with nerve muscle physiology, Chemical examination of common normal and abnormal ingredients of Urine.

PATHOLOGY

Study and Examination

Theoretical Part :

General Pathology – How to study and scope of the Pathology in Biochemic System of Medicine.

Health :

Disease – Defination, Classification and Etiology

Inflammation – Defination, Classification, Etiology, Clinical manifestition and special tissues suppuration of the Inflammation.

Disturbances of the Circulation :

Fever, Oedema, Hyperaemia, Hypertrophy, Hyperplasia, Thrombosis, Embolism, Infection, Infarction, Jaundice, Necrosis, Gangrene.

Changes of Degenerative Tissue :

Atrophy, Mucoid, Hyaline, Amyloid, Albumin and Fatty degeneration.

Changes of the Proliformative Tissue :

Tumours – Defination, Classification, Etilogy, Fibroma, Myoma, Lipoma, Osteoma, Chondroma, Lymphoma, Malignant-Tumours, Cancers, Sarcoma, Cysts and Infective Granulomata.

Immunity :

Defination, Classification Immunity of Natural, Acquired, Active and Passive, Virus and Vaccination.

Special pathology :

Diseases of the Blood – Anaemia,

Collection, preparation and Examination of morbid materials following as :

Acid – Fast staining, Doremus Ureometer, Esbach's Albuminometer E.S.R. Tube, Gram's Staining method, Maemoeytometer, Haemoglobinometer, Lumber Puneture Needle, Leishmans Staining, Stornal Puncture Needle, Staining methods. Blood, Urine, Pus, Sputum and Exceedates Test Urinemeter, Widle reaction Test. Pathological slides.

PRACTICE OF MEDICINE

Theoretical Part :

Introductory lecture or study & scope of practice of medicine in Biochemic System of Medicine.

Blood and infectious diseases :

Anaemia, Chlorosis, Progressive, Pernicious Anaemia

Infectious Diseases :

Scarlet, Remittent, Kala-Zar, Typhoid, Yellow, Dangue Fever, Measles, Mumps, Influenza, Beriberi, Dropsy and Worms Infection.

Diseases of the Heart :

Palpitation of the Heart, Tachycardia, Bradycardia, Acute Pericardities, Acute Endocarditis, Acute Myocarditis.

Diseases of the Digestive Organs (system) :

Acute Glossitis, Stomatitis, Gastritis, Dyspepsia, Diarrhoea, Constipation, Vomiting, Cholera, Dysentry, Colitis, Peritonitis, Toothache, Piles, Haemorrhoids.

Diseases of the Liver :

Hepatities, Jaundice, Abscess of the Liver.

Diseases of the pancreas and Spleen :
Acuit pancreatitis, Splenitis, Splenalgia.

Diseases of the Urinary (Organs) Sestem :

Urinary trad enjection, Albuminuria, Phosphoturia, Pyuria, Anuria, Urethritis, Cysttis, Urobilin, Inttaematuria.

Diseases of the Brain and Nervous System :

Meningitis, Headache, Vertigo, Tetanus, Paralysis, Spasm, Convulsion, Neuritis.

Diseases of the Eye :

Conjunctivitis, Opthalmia.

Diseases of the Ear :

Otitis, Otorrhaea, Mastoiditis.

Diseases of the Nose :

Rhinitis.

Diseases of the Genital :

Spermatorrhoea, Hydrocele, Postritis, Orchitis Impotence.

Practical Part :

Infectious Diseases. Disorder of the Endocrine System, Diseases of the Metabolism Defeciency, Diseases of the Digestive, Resperatory System, Blood Diseases, Urinary Diseases in the Theoretical, Tropical Diseases take the case, Lower of Biochemic and Complex remedy.

BIO-CHEMICAL SCIENCE

1. Biochemical Cytology – Cellular structure in Biochemic human body – Physical basis of life – Analysis of basic substance of life.
2. Cellular Biochemical Pathology – Disease due to abnormal cells – Caused by deficiency of inorganic biochemical salts – Inorganic Biochemical salts of different types of cells or tissues.
3. Biochemical Histopathology – Biochemical field of action – the different tissues in biochemic human body – Functions of Biochemical functional inorganic constituents.
4. Clinical Biochemical Medical Study – Biochemical deficiency – Biochemical application of functional Bio-molecules in the form of Biochemical Medicines.
5. Biophysio-Chemical Principles – Solutions – Units of Solution concentration – Filtration – Diffusion – Osmosis – Ultrafiltration – Dialysis – Surface Tension – Adsorption – Hydrotropic action – Donar equilibrium – Colloid – Atomic structure – Isotope – Acid base Hydrogen ion concentration – PH – Buffers.

BIOCHEMISTRY

Renal Function :

Formation and composition of urine, Blood Digestion & Respriatory System Assessment of liver function Energy Metabolism or calorimetry, Nutrition, Hormones, Toxicants in Food, Blood, Lymph and Cerebro-Spinal fluid, Growth factor of carcinoma.

Practical Part :

Test of Carbohydrates :

Molisch's, Iodine, Benedicts, Deduction of Mythyline Blue,
Detection of an unknown solution.

Fat :

Solubility, Grease spot test Formadehyde – H_2SO_4 Test.

Proteins :

Biurit Test, Millon's test Coagulation reaction Precipitation reaction.

Vitamins :

Detection of Vit A in cod-Liver Oil, Detection of Nicotunic Acid.

Test of Urine, Stool Blood Saliva Test of some Substances :

Aldehyde, Acetone, Formic Acid, Acetic Acids, Glycorol, Cholestoral, Urea-Uric Acid, Ethyl Alcohol.

BIO-CHEMIC MATERIA MEDICA

Symptoms of the Twelve Tissue remedies :

Constitutional, Characteristic, Common, Uncommon, Less Common and Modalities.

Name of the remedies :

Common Name, Chemical Name, Simple Name and Name of the Abriviation.

Data :

Chemical Data, Physiologico-Chemical Data, Biochemic data,
Different of the Biochemic and Homoeopathic data.
Preparation of the Tissue remedies.
General action and reaction of the Tissue remedies.
Characturistic indications of the remedies.
Administration of the remedies.
Relationship of the remedies.
Detail description of the Twelve Tissue remedies.

Calcarea Fluorica, Calcarea Phosphorica, Calcarea Sulphurica, Ferrum Phosphoricum,

Kali Muriaticum, Kali Phosphorica, Kali Sulphuricum, Magnesia Phosphorica, Natrum Muriaticum, Natrum Phosphorica Natrum Sulphuricum, Silicea.

COMPLEX SYSTEM OF MATERIA MEDICA

A. Redline Symptoms.

B. Treat : Tabs + Liquid + Cap

1. Chloral Complex 2. China Complex 3. Chin-Sulph-Complex 4. Cocculus Complex
5. Crataegas Complex 6. Dolichos Complex 7. Drosera Complex 8. Echin Complex
9. Eupetoporium Complex 10. Eosinomplex 11. Febrol 12. Filaria Complex
13. Euphobia Complex 14. Gels. Complex 15. Glono Complex 16. Hama Complex
17. Helonias Complex 18. Hydroco Complex 19. Hype. Complex 20. Ipe. Complex