

Teaching Plan
Dept–Physiology including Biochemistry - THEORY
Year- Ist BHMS
Batch - Feb 2023 - June 2024

Month	Dr. Amondikar	Dr. Tanksale	Dr. Jadhav
Feb 23	Address and foundation course	Address and foundation course	Address and foundation course
Feb 23	Introduction to cellular Physiology – cell structure and functions	Body fluids and immune mechanism	Biophysics- Diffusion, osmosis, filtration, ultrafiltration
Mar 23	Cell division , cell junctions	Haematology – Red blood cells, Hb, Anaemia, jaundice, ESR, PCV	Adsorption, Hydrotropy, colloid, Donnan equilibrium
April 23	Transport across cell membrane, body fluid compartments, homeostasis	Haematology – WBC, immunity, platelets, Coagulation, blood groups	Dialysis, absorption, assimilation, surface tension, trace elements
May-june 23	Nerve muscle physiology- Neurone and neuroglia, classification of properties of neurone, degeneration and regeneration.	Blood volume, Blood transfusion RE system, tissue macrophages	Skin and integumentary system- structure and functions
July 23	Nerve muscle physiology- NM junction, structure, properties of skeletal , cardiac and smooth muscles, applied.	Lymphatic system, tissue fluid and oedema	Skin and integumentary system- regulation of body temperature
Aug 23	Central nervous system-introduction, neuron and neuroglia	Endocrine system introduction, Hypothalamus	Cardiovascular system introduction
Sept 23	CNS synapses- classification , properties, transmission	HP axis, Pituitary gland(Ant and Post Pituitary)	CVS-Structure and properties of cardiac muscle
Oct 23	CNS – Neurotransmitters, receptors- classification, properties, Reflexes- classification, properties	Thyroid Gland, Parathyroid gland, Endocrine part of pancreas	CVS- Cardiac cycle, general principles of circulation, heart sounds,
Nov 23	CNS – sensations , pain pathway, spinal cord- structure , functions, different tracts, section of spinal cord	Adrenal cortex, Adrenal medulla, local hormones, Endocrine functions of other organs	ECG-normal and abnormal recording, Cardiac output-factors affecting, regulation
Dec 23	Brain stem- structure	Respiratory System-	Heart rate , Blood

	and functions, vestibular apparatus, cerebrum, diencephalon	intro, movements, transport of gases, exchange of resp gases	pressure factors affecting and regulation
Jan 24	CNS – cerebellum, higher intellectual functions, EEG, CSF,ANS	Regulation of respiration, Disturbance in resp, High altitude and deep sea physiology, artificial respiration	Radial pulse, Regional circulation
Feb 24	Special senses – olfaction , taste, vision	Digestive system- Salivary glands, stomach, Pancreas, Liver, gall Bladder	Reproductive system- Male reproductive system
March 24	Special senses – vision, hearing	Small Intestine, Large intestine, movements of GI tract, GI hormones	Female Reproductive system
April 24	Biochemistry- chemistry and metabolism of proteins carbohydrates ,and fats	Metabolism of Carbohydrats, fats and protiens. Excretory System- Intro, Nephron	Pregnancy, Diagnosis of pregnancy, parturition, Infertility
May –june 24	Biochemistry – Enzymes, Vitamins Mineral metabolism, organ function tests	JG apparatus, renal circulation, urine formation, Conc. of urine. RFT, Renal failure, Micturition, dialysis .	Placenta, Pregnancy tests Fertility control, Mammery Gland and lactation.

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Month	Dr. Amondikar	Dr. Tanksale
Feb 23	Address and foundation course	Address and foundation course
Feb 23	Clinical examination general aspect, history taking	Introduction to haematological practicals Compound microscope Collection of blood sample Hb % estimation
Mar 23	Clinical general examination, examination of pulse, B.P., temperature	ESR PCV Blood indices BT and CT
April 23	Systemic examination Examination of muscles and joints	Blood groups, Haemocytometry RBC count
May-june 23	Examination of CVS, ECG recording, OPD	Total WBC count Differential count
July 23	Examination of Respiratory system, OPD	Absolute eosinophil count
Aug 23	Examination of RS- spirometry, stethography, OPD	Clinical exam of NS- cranial nerves Clinical exam of sensory system Clinical exam of motor system I
Sept 23	Clinical examination of nervous system introduction, history taking, OPD	Clinical exam of motor system II Posture, gait, reflexes
Oct - 23	Clinical examination of nervous system – higher functions, OPD	Exam of special senses – olfaction Exam of taste
Nov 23	Uses of instruments and equipments. OPD	Examination of eye- vision Visual acuity, visual reflexes
Dec-23	Qualitative analysis of proteins - colour reactions and ppt. reactions	Reproductive system- diagnosis of pregnancy, OPD
Jan 24	Qualitative analysis of carbohydrates – mono, di and polysaccharides	Clinical examination of GIT, OPD
Feb 24	Qualitative analysis of fats. Normal constituents of urine	Clinical examination of GIT, OPD
Mar 24	Abnormal constituents of urine Urine report	Instruments or equipments used in haematology and clinical physiology
April 24	Quantitative estimation of glucose, total proteins, uric acid in blood	Revision practicals, opd applied physiology
May-June 24	Organ function tests Interpretation and discussion of results of biochemical tests	Revision practicals, opd applied physiology

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