

**NAME OF THE DEPARTMENT: PHYSIOLOGY-  
Lecture and other activities details for the year- 2022-23**

Sr. No.	Faculty name	GMC registration no. (pg/ug both)	CURRENT DESIGNATION & DATE OF PROMOTION	Nature of Employment Regular/permanent or contract/outsourced	Details of Service in the Last 5 Years					Numbers of lectures per year, small teaching group with topics covered	Medical educator training (yes/no) If yes then which date	Basic course in biomedical research (BCBR) (yes/no) If yes then which date
					1	2	3	4	5			
1	Dr Anita Verma	G-22103(UG) G-9643(PG)	Professor& HOD 28.02.20015	Permanent	Y	Y	Y	Y	Y	MBBS lecture- 24 (each of 1 hour)  1) Homeostasis 2) Introduction to digestive system 3) MALT & Enteric nervous system & control of GI function 4) Saliva- control of secretion & functions, applied 5) Gastric juice, composition, function & control of secretion, mechanism of HCl secretion & control, gastric ulcer 6) Intestinal juice – composition & function & control of secretion 7) Liver & bile juice, pancreatic juice 8)Enterohepatic circulation & jaundice 9) mastication & deglutition 10) movements of stomach 11) movements of intestine 12) defecation 13) GI hormones 14) Special senses-introduction 15) Physiology of taste & smell 16) Hearing-functional anatomy 17) Middle ear function 18)physiology of hearing-transduction & pathway 19) Electrophysiology of hearing 20) deafness	1.Basic course MEU 5-7 February 2012, NHL MMC, Ahmedabad 2. Workshop on research methodology 2-3 april 2012 3. Mentortership training 4.CISP 3-5 April 2019	Yes August-December 2020

										<p>21) functional structure of eye, extraocular muscles, aqueous humour</p> <p>22) Accommodation &amp; errors of refraction</p> <p>23) visual pathway &amp; lesions</p> <p>24) retina ,colour vision, colour blindness</p> <p><b>SDL-</b></p> <p>1. Molecular motors, cell adhesion molecules, intercellular junctions</p> <p>2. Errors of refraction</p> <p><b><u>Small Group discussion=</u></b> Total 6 hrs</p> <p>1) AETCOM= Doctor patient relationship 3 hours,</p> <p>2) Medical Humanities= Empathy, compassion, communication 3</p> <p><b>Skill lab-</b>Pulse, BP, Sensory system examination= 3 hrs</p>		
2	Dr Ashok Solanki	G-22153 (UG) G-10828 (PG)	Associate Professor 26.02.2009	Permanent	Y	Y	Y	Y	Y	<p><b>i) Lecture list mbbs= 22</b> (each of 1 hour)</p> <p>1)Introduction to endocrinology</p> <p>2) Hormones classification</p> <p>3) Mechanism of hormone action</p> <p>4) Introduction to Pituitary gland</p> <p>5)Growth hormone functions</p> <p>6)Growth hormone regulation and disorders</p> <p>7) Posterior pituitary gland, ADH, Oxytocin</p> <p>8) Thyroid hormone anatomy, synthesis</p>	Yes CISP 3 <sup>rd</sup> -5 <sup>th</sup> April 2019 Basic course MEU (BCME) 4 <sup>th</sup> Oct 23 to 6 <sup>th</sup> Oct-23. 2023,NHL MMC, Ahmedabad	Yes Aug-December-2020

										<p>9) Functions of thyroid hormone  10) Thyroid hormone regulation, thyroid function test  11) Disorders of thyroid gland  12) Function of parathyroid gland  13) Calcium Homeostasis  14) Disorders of parathyroid hormone  15) Adrenal gland; Functions of cortisol  16) Functions of Glucocorticoids  17) Disorders of adrenal gland  18) Adrenal medullary hormones  19) Insulin synthesis and functions  20) Glucagon functions  21) Regulation of blood sugar  22) Diabetes Mellitus: Pathophysiology</p> <p><b>Skill lab-</b>  1. Pulse, BP, Sensory system examination=3 hrs each  <b>SDL(self directed learning)-</b>  RMP &amp; Action potential -3 hours  <b>Small group discussion/tutorial</b>  Properties of all 3 muscles =3 hrs</p>		
3	Dr Neeraj Mahajan	G-25829 (UG) G-10827 (PG)	Professor 22.07.2009	Permanent	Y	Y	Y	Y	Y	<p><b>i) Lecture list MBBS=31</b>(each of 1 hour)</p> <p>1) Transport across cell membrane-I  2) Transport across cell membrane-II  3) Apoptosis  4) Body Fluid  5) Inter-cellular</p>	<p>Yes,  FAIMER, GSMC, Mumbai, 2023 Batch,  ACME, CMC, Ludhiana, 2014 Batch,  Revised Basic Course Workshop, 12 to 13<sup>th</sup> June,</p>	<p>Yes,  August – December, 2020</p>

										<p>communication</p> <p>2015 at MCI, Delhi.</p> <p>6) CNS-II Introduction</p> <p>7) Cerebral cortex introduction</p> <p>8) Temporal lobe (Cerebral cortex)</p> <p>9) Frontal Lobe (Cerebral cortex)</p> <p>10) Prefrontal lobe (Cerebral cortex)</p> <p>11) Parietal lobe (Cerebral cortex)</p> <p>12) Assessment of Cerebral cortex</p> <p>13) Introduction of motor axis (CNS)</p> <p>14) Thalamus-I</p> <p>15) Thalamus-II</p> <p>16) Limbic System-I</p> <p>17) Limbic System-II</p> <p>18) Hypothalamus-I</p> <p>19) Hypothalamus-II</p> <p>20) Basal Ganglia-I</p> <p>21) Basal Ganglia-II</p> <p>22) Basal Ganglia-III</p> <p>23) Cerebellum-I</p> <p>24) Cerebellum-II</p> <p>25) Cerebellum-III</p> <p>26) Speech-I</p> <p>27) Speech-II</p> <p>28) EEG-I</p> <p>29) EEG-I</p> <p>30) Sleep Physiology</p> <p>31) Tone, Posture and Equilibrium</p> <p><b><u>Small Group discussion</u></b></p> <p>1. AETCOM= Doctor patient relationship 3 hours.</p> <p>2. Properties of all 3 muscles =3 hrs</p> <p><b>Skill lab</b>-Pulse, BP, Sensory</p>	<p>CISP-I, 23-24 January, 2019 at MCI, New Delhi</p> <p>CISP-II, 10-12 June, 2020 by MCI, New Delhi (Online)</p> <p>(Presently working as Convener, NMC Nodal Centre, NHLMMC, Ahmedabad, and Gujarat.</p>
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										system examination=3 hrs <b>SDL-</b> -3hrs RMP & Action potential		
4	Dr Nita	G-28147 (UG) G-10827 (PG)	Assistant Professor 09.05.2006	Permanent	Y	Y	Y	Y	Y	Total lectures= 25(each of 1 hour) 1) Introduction to the blood. 2) Plasma proteins 3) Erythropoiesis 4) Hemoglobin 5) Iron and fate of RBCs and Jandice. 6) Blood indices and Polycythemia. 7) Anaemia. 8) Blood group 9) Introduction to WBCs 10) Innate immunity 11) Humoral immunity 12) Cellular immunity 13) Introduction of platelets. 14) Haemostasis 15) Hemolytic disorders. 16) Introduction to reproductive system. 17) Puberty 18) Sex determination and differentiation 19) Male reproductive system 20) Female reproductive system 21) Methods of contraception 22) Pregnancy 23) Lactation 24) Applied aspect. 25) Cases related to topics  <b>Skill lab-</b> Pulse, BP, Sensory system examination=3 hrs <b>SDL-</b> RMP & Action potential - 3hours	Basic course MEU 1-2 August 2018	Assistant Professor December, 2020

											<b>Small group discussion-</b> Properties of all 3 muscles =3 hrs		
5	Dr Shaista	G-25858 (UG) G12589 (PG)	Assistant Professor 27.02.2009	Permanent	Y	Y	Y	Y	Y	<p>MBBS Lectures= 33(each of 1 hour)</p> <ol style="list-style-type: none"> <li>1. Introduction and structure of neuron.</li> <li>2. Myelination, Classification of nerves</li> <li>3. Properties of nerves</li> <li>4. Resting Membrane Potential</li> <li>5. Action Potential: Definition, Phases of AP</li> <li>6. Action Potential: Properties</li> <li>7. Degeneration and Regeneration of nerve: Types, Degeneration</li> <li>8. Degeneration and Regeneration: Regeneration, applied</li> <li>9. Synapse: Definition, structure, transmission.</li> <li>10. Synapse: Properties</li> <li>11. Receptor: Definition, classification</li> <li>12. Receptor: Properties, applied</li> <li>13. Reflexes: Definition, reflex arc, classification</li> <li>14. Reflexes: Properties</li> <li>15. Stretch reflex</li> <li>16. Ascending tracts: Location, types, course.</li> <li>17. Ascending tracts: Goll and Burdach, applied</li> <li>18. Descending Tracts: Location, types, course.</li> <li>19. Descending tracts: Pyramidal tract, applied</li> <li>20. Lesions of spinal cord:</li> </ol>	<p>Yes.</p> <p>FAIMER= CMC, Ludhiana, 2016 Batch,</p> <p>ACME= CMC, Ludhiana, 2014 Batch,</p> <p>Rbcw, AETCOM: 21-23 December 2021,</p> <p>CISP 1= 15-7<sup>th</sup> February 2019.</p>	Yes March June 2020	

										<p>Brown sequard syndrome, UML LMN lesions</p> <p>21. Lesions of spinal cord: Complete and Incomplete section of SC</p> <p>22. Pain: Definition, types, transmission, Endogenous pain inhibiting mechanism, applied</p> <p>23. Introduction, Structure of eyeball</p> <p>24. Optics of eye, Errors of refraction</p> <p>25. Visual pathway</p> <p>26. Lesions of visual pathway</p> <p>27. Visual acuity, visual adaptation</p> <p>28. Photochemistry of vision</p> <p>29. Color vision.</p> <p>30. Foundation course: Disability Competency</p> <p>31. Foundation course: Cultural Competency</p> <p>32. Foundation course: History of Medicine</p> <p>33. Foundation course: Learning Strategies</p> <p><b><u>Small Group discussion=</u></b>  <u>Total 6 hrs &amp; 1 hour every 15 days</u>  AETCOM-  1.Doctor patient relationship - 3 hours,  2.Medical Humanities= Empathy, compassion, communication 1 hour every 15 days  3.Properties of all 3 muscles-3hours</p>	
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											<p><b>Skill lab</b>-3hours each Pulse, BP, Sensory system examination <b>SDL</b>- 3hrs RMP &amp; Action potential</p>		
6	Dr Urvashi kapadia	G- 30847(UG) G- 13990(PG)	Assistant Professor 28.02.2009	Permanent	Y	Y	Y	Y	Y	<p>MBBS lectures= 249(each of 1 hour) 1.classification of muscles 2.Neuromuscular Junction -Intro, structure, transmission 3. NMJ disorder &amp; drugs acting on NMJ 4. sarcomere, structure of actin, myosin Sarco tubular system &amp; function 5.muscle contraction 1 6. muscle contraction 2 7. properties of muscle 1 8. properties of muscle 2, EMG 9- motor unit, rigor mortis, red &amp; white muscle 10. Smooth muscle 11. muscular dystrophy, disorders 12.Introduction of renal system, functions of kidney 13.Renal blood flow, Nephron 14.JG apparatus 15. GFR- determinants &amp; factors Affecting GFR 16.GFR -Autoregulation 17.Tubular reabsorption</p>	<p>Yes 1.Basic course MEU 17-17feb 2010 2.CISP-II 12-13 oct,2020 3.Revised Basic course 19-21 december,2017 4.ATCOM Sensitization programme 22 december, 2017 5.Workshop on research methodology 2-3 april 2012</p>	<p>Yes August- December- 2020</p>	



										<p>18. Tubular secretion  19.counter current mechanism – concentrated urine, diluted urine  20. Acid base balance, acidification of urine  21.micturition process, cystometrogram  22.renal failure, diuretics  23. Dialysis &amp; artificial kidney  24. renal function test</p> <p><b>Skill lab</b>-Pulse, BP, Sensory system examination=3 hrs  <b>SDL</b>- RMP &amp; Action potential - 3hrs  <b>Small group discussion</b>- Properties of all 3 muscles =3 hrs</p>		
7	Dr Chetna Ramanuj	G-31472 (UG) G-13991(PG)	Assistant Professor 26.02.2009	Permanent	Y	Y	Y	Y	Y	<p>MBBS lectures = 22(each of 1 hour)</p> <ol style="list-style-type: none"> <li>1. CVS introduction</li> <li>2. Cardiac muscle</li> <li>3. Properties of muscle</li> <li>4. Properties of muscle</li> <li>5. Conducting system</li> <li>6. ECG introduction</li> <li>7. ECG</li> <li>8. ECG</li> <li>9. ECG</li> <li>10.ECG</li> <li>11.Cardiac Cycle</li> <li>12.Cardiac Cycle</li> <li>13.Cardiac Cycle</li> <li>14.Heart Sounds</li> <li>15. Blood Pressure</li> <li>16. Regulation of BP</li> <li>17. Regulation of BP</li> <li>18. Cardiac output</li> <li>19. Coronary circulation</li> <li>20. Shock</li> <li>21. Cardiac Failure</li> <li>22. Hemodynamics</li> </ol>	<p>Yes</p> <p>CISP 3-5 April 2019  Basic course MEU  5-7 February  2013,NHLMMC,Ahmedabad</p>	<p>Yes</p> <p>Aug- Dec2020</p>

										<b>Skill lab</b> -Pulse, BP, Sensory system examination=3 hrs <b>SDL</b> - RMP & Action potential - 3hrs <b>Small group discussion</b> - Properties of all 3 muscles =3 hrs		
8	Dr Parika	G-20300 (UG)	Tutor							Total= 12 (each of 2 hours) 1. Instruments, Video of dissection of frog's nerve and muscle 2. Simple muscle curve, 3. Effect of temperature on skeletal muscle 4. Effect of load on skeletal muscle 5. Quantal summation, 6. Strength duration curve 7. Effect of 2 successive stimuli on skeletal muscle 8. Effect of fatigue on skeletal muscle 9. Ergography 10. Velocity of nerve impulse 11. Genesis of tetanus on frog's skeletal muscle 12. Action potential of Nerve fibre and cardiac muscle  <b>Skill lab</b> -Pulse, BP, Sensory system examination=3 hrs <b>SDL</b> - RMP & Action potential - 3 hours <b>Small group discussion</b> -3 hrs properties of all 3 muscles & all the above practicals=1 hr each	Basic Medical Workshop 2010.	No
9	Dr Gargi	G-43481 (UG) G-21318 (PG)	Tutor							MBBS practicals= 12 (each of 2 hours) 1. Microscope, neaubaur chamber 2. Haemoglobin estimation 3. Total RBC count. 4. Total WBC count	1.CISP-II 12-13 oct,2020 2.Revised Basic course 19-21 december,2017	Yes Aug- Dec2020

										<p>5. Differential WBC count  6. Absolute WBC count and Arneth count  7. Bleeding time, Clotting time  8. Effect of saline on RBC, Osmotic fragility  9. Blood group, Blood indices  10. Platelet count  11. Reticulocyte count  12. ESR, PCV</p> <p><b>Skill lab</b>-Pulse, BP, Sensory system examination=3 hrs  <b>SDL</b>- RMP &amp; Action potential  <b>Small group discussion</b>- Properties of all 3 muscles =3 hrs  &amp; all the above practicals=1 hr each</p>	
10	Dr Meenu	G-41001 (UG) G-21062 (PG)	Tutor							<p>Total= 18 (each of 2 hours)</p> <ol style="list-style-type: none"> <li>1. Recording of body temperature</li> <li>2. Examination of radial pulse</li> <li>3. Artificial respiration</li> <li>4. Spirometry and respiratory efficiency tests</li> <li>5. Clinical examination of respiratory system</li> <li>6. Recording of blood pressure</li> <li>7. ECG</li> <li>8. Clinical examination of CVS</li> <li>9. Examination of sensory system</li> <li>10. Examination of motor system</li> <li>11. Examination of reflexes</li> <li>12. Cardiac efficiency tests</li> <li>13. Perimetry</li> <li>14. Clinical examination of abdomen</li> <li>15. General examination</li> <li>16. Autonomic function tests</li> <li>17. Cranial nerve examination</li> <li>18. Higher functions</li> </ol>	Yes jan-march 2022

										<p><b>Skill lab</b>-Pulse, BP, Sensory system examination=3 hrs  <b>SDL</b>- RMP &amp; Action potential  <b>Small group discussion</b>- Properties of all 3 muscles =3 hrs  &amp; all the above practicals=1 hr each</p>	
11	Dr Hina	G-42578 (UG)  G-21656 (PG)	Tutor							<p>Total= 13 (each of 3 hours)  1. EMG, NCV, EEG  2. O<sub>2</sub> &amp; CO<sub>2</sub> dissociation curve charts  3. Cystometrogram, Audiogram  4. Periodic breathing, cheyne stokes breathing  5. lung volume and capacities, flow volume loop  6. volume and pressure changes during cardiac cycle  7. Menstrual cycle, basal body temperature  8. PHOTOGRAPHS  9. Normal frog's cardiogram,  10. Effect of temp. on frog's cardiogram  11. Effect of vagus &amp; crescent on frog's heart and vagal escape  12. Effect of drugs on frog's heart  13. Perfusion of frog's heart, Recording of mammalian BP and respiration</p> <p><b>Skill lab</b>-Pulse, BP, Sensory system examination=3 hrs each  <b>SDL</b>- RMP &amp; Action potential  <b>Small group discussion</b>- Properties of all 3 muscles =3 hrs  &amp; all the above practicals=1 hr each</p>	Yes jan-march 2022

