



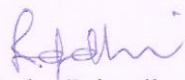
**VINAYAKA MISSION'S KIRUPANANDA VARIYAR  
MEDICAL COLLEGE & HOSPITALS, SALEM – 636308.**


**Vinayaka Mission's Research Foundation (Deemed to be University)**


**ANNUAL TIME-TABLE**


**I MBBS (2019 – 2020 batch)**

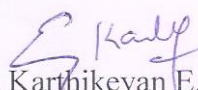
MODULE	NAME OF THE MODULE	Time period
	Foundation Course	Aug 2019
1.	General Module	Sept 2019
2.	General Embryology, Genetics, General Histology, Haematology, Immunology	Sept/Oct 2019
3.	Locomotor System & Autonomic Nervous System, Minerals	Oct/Nov 2019
4.	Cardiovascular System	Nov/Dec 2019
5.	Respiratory system	Dec 2019
6.	Endocrine system	Dec 2019/ Jan 2020
7.	Head & Neck, Special Senses and Central Nervous System, Carbohydrate Metabolism, Vitamins, Amino acids	Jan / Feb / March 2020
8.	Renal system, Temperature regulation, acid base balance, ammonia metabolism	April 2020
9.	Gastrointestinal System, Molecular biology, cancer genetics, advances in molecular biology	June 2020
10.	Reproductive system	July 2020
11.	Revision	July 2020
12.	Model Exam & Study Holidays	Aug 2020
	<b>Total</b>	<b>44 weeks</b>
13.	<b>Vacation</b>	4 weeks
14.	<b>University Exams</b>	4 weeks
	<b>Grand Total</b>	<b>52 weeks</b>


  
Dr. R. Indra Priyadharsini  
MEU Coordinator

  
Dr. Deepti Shastri,  
Professor & HOD, Department  
of Anatomy (preclinical)

  
Dr. S. Rajaram  
Professor & HOD, Department of  
Pharmacology (paraclinical)

  
Dr. R. Shanmugasundaram  
Professor, Department of  
General Medicine (Medicine  
& allied disciplines)

  
Dr. Karthikeyan E.M.J.,  
Professor, Department of  
Surgery (Surgery & allied  
disciplines)

  
Dr. K. Prakasam,  
Dean & Professor,  
Department of Orthopaedics  
(Chairman – Curriiculum Committee)

**TOTAL TEACHING HOURS – MCI / VMKVMCH, SALEM**

	<b>MCI Prescribed</b>	<b>VMKVMCH, Salem</b>
Foundation course	175 hrs	174 hrs
Anatomy	675 hrs	732 hrs
Physiology	495 hrs	533 hrs
Biochemistry	250 hrs	264 hrs
CM	52 hrs	62 hrs
ECE	90 hrs	90 hrs
Professional Dev	48 hrs	33 hrs
Sports & extracurricular activities	60 hrs	88 hrs
Formative assessment & Term exams (33+*45=78) *reduced from total teaching hours of Anatomy, Physiology & Biochemistry)	80 hrs	78 hrs (*45 hours from Total teaching hours of Anatomy / Physiology / Biochemistry)

Subjects	MCI / VMKVMCH hours distribution	Lectures (hours)	Small Group Teaching/ Tutorials/ Integrated learning/ Practical (hours)	Self directed learning (hours)	Total (hours)
Anatomy	MCI	220	415	40	675
	<b>VMKVMCH</b>	<b>220 + 11 formative assessment</b>	<b>457</b>	<b>44</b>	<b>732</b>
Physiology	MCI	160	310	25	495
	<b>VMKVMCH</b>	<b>165 + 11 formative assessment</b>	<b>329</b>	<b>28</b>	<b>533</b>
Biochemistry	MCI	80	150	20	250
	<b>VMKVMCH</b>	<b>80 + 11 formative assessment</b>	<b>151</b>	<b>22</b>	<b>264</b>
Early Clinical Exposure	MCI		90	0	90
	<b>VMKVMCH</b>		<b>90</b>		<b>90</b>
Community Medicine	MCI	20	27	5	52
	<b>VMKVMCH</b>	<b>22</b>	<b>34</b>	<b>6</b>	<b>62</b>
Professional development including ethics	MCI		48	0	48
	<b>VMKVMCH</b>		<b>33</b>		<b>33</b>
Sports and extracurricular activities	MCI				60
	<b>VMKVMCH</b>				<b>88</b>
Formative assessment and Term examinations	MCI				80
	<b>VMKVMCH</b>				<b>78</b> <b>(*45 hours from Total teaching hours of Anatomy / Physiology / Biochemistry)</b>
Total	MCI				1750
	<b>VMKVMCH</b>				<b>1790</b>

**VINAYAKA MISSION'S  
KIRUPANANDA VARIYAR MEDICAL COLLEGE & HOSPITALS,  
SALEM – 636308.**

**FOUNDATION COURSE  
I MBBS (2019 – 2020 batch)**

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
Day 1	9.00 am -10.00 am	Registration	Faculty of preclinical departments
	10.00 am -10.15 am	Tea break	
	10.15 am -11.30 am	Inauguration	Dean - Dr. K. Prakasam
	11.30 am -12.30 pm	Introduction of parents & students to Faculty Mentors	Dr. Milind V Bhutkar Dy. Dean (Admin) Prof & HOD, Physiology
	12.30 pm - 1.15 pm	Lunch break	
	1.15pm -4.15 pm	Parents-Teachers Meeting: Meeting of mentors & mentees & their parents	Faculty of preclinical departments
Day 2	8.15 am - 9.15 am	#White coat measurement #Identity Card photo session	Faculty of preclinical departments Tailor
	9.15 am -11.15 am	Introduction of faculty of preclinical departments & students to each other	Dr. Deepti Shastri Dy. Dean (academics) Prof & HOD, Anatomy
	11.15 am -11.30 am	Tea break	
	11.30 am -12.30 pm	Medical Profession & Physician's role in Society	Dr. S.R. Rangabashyam Prof. & HOD, Medicine
	12.30 pm - 1.15 pm	Lunch break	
	1.15pm -3.15 pm	Hospital visit	Faculty of the 3 preclinical departments in rotation
	3.15 pm -4.15 pm	Introduction to Anti-ragging Committee	Dr. V. Suganthi Associate Prof., Physiology
Day 3	8.15 am - 9.15 am	Bio-data filling	Faculty of all three preclinical departments
	9.15 am -10.15 am	Introduction to MBBS Course	Dr. B. Evangeline Nesa Rathnabai Prof. & HOD, Biochemistry
	10.15 am -10.30 am	Tea break	
	10.30 am - 11.30 am	History of Medicine	Dr. S.R. Rangabashyam Prof. & HOD, Medicine
	11.30 pm -12.30 pm	Health Care & its delivery	Dr. Shanmugasundaram Prof. Of Medicine
	12.30 pm -1.15 pm	Lunch break	

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	1.15 pm -2.15 pm	Guidelines for online submission of Anti-ragging undertaking by students & parents/guardians	Dr. K. C. Shanthi, Associate Prof., Anatomy
	2.15 pm - 4.15 pm	National Health Priorities & Policies - Documentary film followed by lecture	Dr. S. Sangeetha Prof. & HOD, Community Medicine
Day 4	8.15 am -9.15 am	Staying at hostel for 1 <sup>st</sup> time Ecstasy and pitfalls	Mr. S. Syed Liyakath Ali, Tutor, Physiology
	9.15 am - 10.15 am	Universal precautions & vaccinations	Dr. Senthamarai Prof. & HOD, Paediatrics
	10.15 am -10.30 am	Tea break	
	10.30 am – 11.30 pm	Documentary film on vaccinations	Department of Paediatrics
	11.30 am -12.30 pm	Patient safety & Biohazard safety - SDL	Dr. D. Ponnudhali, Associate Prof, Biochemistry
	12.30 pm -1.15 pm	Lunch break	
	1.15 am– 2.15 pm	Patient safety & Biohazard safety	Dr. R. Indra Priyadharsini Co-ordinator, MEU Prof. & HOD, Microbiology
	2.15am -4.15 pm	Sports - Outdoor /Indoor games	Dr. B. Jaya Prakash, Students Amenities Incharge
Day 5	8.15 am -9.15 am	Recap on Patient safety & Biohazard safety by students	Department of Microbiology
	9.15 am - 10.15 am	Stress Management -Activity	Dr. Lakshmi Dorai Assistant Prof., Dept. Of Psychiatry
	10.15 am -10.30 am	Tea break	
	10.30 am -11.30 am	Stress Management -Activity	Dr. Lakshmi Dorai Assistant Prof., Dept. Of Psychiatry
	11.30 am – 12.30 pm	Stress Management -Lecture	Dr. Lakshmi Dorai Assistant Prof., Dept. Of Psychiatry
	1.15 pm – 2.15 pm	Time management	Dr. G. Kannan, Medical Superintendent
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Dr. Preethi, ARMO
Day 6	8.15 am -10.15 am	Time Management - short films	Dr. S. Kavitha, Assistant Prof., Anatomy
	10.15 am -10.30 am	Tea break	

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	10.30 – 12.30 pm	Skit on stress management/time management by students And Meditation & Yoga	Dr. R. Sudha, Assistant Prof., Biochemistry & Mrs. Pratima Bhutkar, Assistant Prof., Physiology
	12.30 pm -1.15 pm	Lunch break	
	1.15 pm – 2.15 pm	The Medical College - Introduction	Dr. Milind V. Bhutkar Prof. & HOD, Physiology
	2.15 pm -4.15 pm	Introduction to fine arts & cultural programs conducted in the institution	Dr. R. Indra Priyadharsini -Head - Students Amenities Committee Dr. B. Jayaprakash - Incharge - Students Amenities
Day 7	8.15 am -9.15 am	Shorts films on professionalism	Mrs. Pratima Bhutkar, Assistant Prof., Physiology
	9.15 am - 10.15 am	Reflection by students on short films on Professionalism	Dr. V. Rajitha, Assistant Prof., Anatomy
	10.15 am -10.30 am	Tea break	
	10.30 am -11.30 am	Medical Ethics	Dean - Dr. K. Prakasam
	11.30 am – 12.30 pm	Introduction to AETCOM Module	Dr. Shanmugasundaram, Prof. of Medicine
	12.30 pm -1.15 pm	Lunch break	
	1.15 pm – 2.15 pm	Medical Professionalism	Dr. EMJ Karthikeyan, DMS, Prof. Of Gen. Surgery
	2.15 pm - 4.15 pm	Local language programme - Introduction	Dr. S. Rajaram Prof. & HOD, Pharmacology
Day 8	8.15 am -9.15 am	Legal aspects related to Medicine	Dr. R. Vallinayagam Prof. & HOD, Forensic Medicine
	9.15 am -10.15 am	Doctor's Rights in India	Dean - Dr. K. Prakasam
	10.15 am -10.30 am	Tea break	
	10.30 am -11.30 am	Roles and Responsibilities of a Medical student	Dr. S. Rajaram, Prof. & HOD, Pharmacology
	11.30 am – 12.30 pm	Teen Safety (RTA/ Substance abuse)	Faculty, Department of Accident & Emergency Medicine
	12.30 pm -1.15 pm	Lunch break	

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	1.15 – 2.15 pm	Introduction to Mentorship Program	Dr. S. Mathavi Associate Prof., Microbiology
	2.15 -4.15 pm	Local language programme - SDL	Dr. Selvam, Tutor, Forensic Medicine
Day 9	8.15 am -9.15 am	Principles of family practice -Role play by students	Department of CM
	9.15 am -10.15 am	Future opportunities in Medicine	Dr. K. Ezhil Vendhan Director, HDC. Prof. & HOD, Ophthalmology
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Primary Health Care and National Health Schemes	Dr. S. Sangeetha Prof. & HOD, Community Medicine
	11.30 – 12.30 pm	Women's Health	Dr. Vimala Prof. & HOD, OBG
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Gender sensitization	Dr. Deepti Shastri Prof. & HOD Anatomy
	2.15 pm -4.15 pm	Local language programme - SDL	Dr. S. Kavitha, Assistant Prof., Anatomy
Day 10	8.15 am -9.15 am	Communication Skills	Dr. A.E. Manoharan Prof. & HOD, Orthopedics
	9.15 am -10.15 am	Communication Skills - Group activity	Faculty of I MBBS
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Communication Skills - Group activity	Faculty of I MBBS
	11.30 – 12.30 pm	Communication Skills - Group activity	Faculty of I MBBS
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Learning Skills	Dr. V. Suganthi Associate Prof., Physiology
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Physical Education Staff
Day 11	8.15 am -9.15 am	Identifying Learning styles of students	Dr. Milind V. Bhutkar Prof. & HOD, Physiology
	9.15 am -10.15 am	Self directed learning & Peer learning methods	Dr. K. C. Shanthy Co-Coordinator, MEU Associate Prof., Anatomy
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Small group learning	Dr. R. Thamil Selvi, Prof. & HOD, Pathology

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	11.30 – 12.30 pm	Introduction to alternative health care systems & their relevance to modern medicine - Homeopathy, Yoga & Naturopathy	Dr. Sheela Joice, Assistant Prof. Physiology
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Introduction to alternative health care systems & their relevance to modern medicine - Ayurveda, Unani & Siddha	Dr. B. Senthil Kumar, Assistant Prof. Anatomy
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Physical Education Staff
Day 12	8.15 am -9.15 am	Introduction to Research	Dr. D. Ponnudhali, Associate Prof., Biochemistry
	9.15 am -10.15 am	Holistic medicine - Philosophy & Practice - Seminar by students	Faculty of preclinical departments & CM
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Interpersonal relationships	Dr. Ruby Thiyagarajan Social Worker, President, YWCA, Salem
	11.30 – 12.30 pm	Interpersonal relationships - Activity	Dr. Ruby Thiyagarajan Social Worker, President, YWCA, Salem
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Interpersonal relationships - Activity	Dr. Ruby Thiyagarajan Social Worker, President, YWCA, Salem
	2.15 pm -4.15 pm	Leisure activities - Books/fine arts/theatre	Dr. Monisha Muthu, Assistant Prof., Dermatology
Day 13	8.15 am -9.15 am	Film on ethics - Miss Evers' Boys	Dr. G. Panneer Selvi, Tutor, Anatomy
	9.15 am -10.15 am	Film on ethics - Miss Evers' Boys	Dr. G. Panneer Selvi, Tutor, Anatomy
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Introduction to Research Ethics	Dr. B. Senthil Kumar, Assistant Prof., Anatomy
	11.30 – 12.30 pm	AETCOM Module 1 - What does it mean to be a Doctor? - Small group Discussion	Dr. EMJ Karthikeyan, DMS, Prof of Surgery
	12.30 pm -1.15 pm	Lunch break	

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	1.15 – 2.15 pm	AETCOM Module 1 - Panel Discussion by Doctors of good standing	Dr. Shanmugasundaram, Prof Of Medicine, Dr. Jones Ronald HOD, Nephrology, VIMS & others
	2.15 pm -4.15 pm	Local language programme - SDL	Dr. S. Kavitha, Assistant Prof., Anatomy
Day 14	8.15 am -9.15 am	SDL - Students' reflections on AETCOM Module 1 sessions 1&2	Dr. EMJ Karthikeyan, DMS, Prof of Surgery
	9.15 am -10.15 am	SDL - Students' reflections on AETCOM Module 1 sessions 1&2	Dr. EMJ Karthikeyan, DMS, Prof of Surgery
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Visit of students to PHC attached to institution	Dr. B. Sangeetha, Prof. & HOD, CM & faculty of CM
	11.30 – 12.30 pm	Visit of students to PHC attached to institution	Faculty of CM
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Visit of students to PHC attached to institution	Faculty of CM
	2.15 pm -4.15 pm	Visit of students to PHC attached to institution	Faculty of CM
Day 15	8.15 am -9.15 am	Closure session on AETCOM Module 1 - Reflections by students	Dr. EMJ Karthikeyan, DMS, Prof of Surgery
	9.15 am -10.15 am	Doctor - Patient (DP) encounter - Building the relationship	Dr. S. Senthil Priya, DMS, Prof., OBG
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Movie – Gifted Hands	Dr. Priya Das, Assistant Prof., Biochemistry
	11.30 – 12.30 pm	Movie - Gifted Hands	Dr. Priya Das, Assistant Prof., Biochemistry
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Reflections by students on DP relationship	Dr. S. Senthil Priya, DMS, Prof., OBG
	2.15 pm -4.15 pm	Local language programme - SDL	Dr. Ramani, Tutor, Biochemistry
Day 16	8.15 am -9.15 am	What does it mean to be a patient?	Dr. R. Shankar Associate Prof., CM
	9.15 am -10.15 am	Movie focused on patient's point of view - WAITING	Faculty, Department of CM
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Movie focused on patient's point of view - WAITING	Faculty, Department of CM



<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	11.30 – 12.30 pm	SDL - what does it mean to be a patient?	Dr. R. Shankar Associate Prof., CM
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	SDL - what does it mean to be a patient?	Dr. R. Shankar Associate Prof., CM
	2.15 pm -4.15 pm	Local language programme - SDL	Mr. Syed Ali Liyakat Tutor, Physiology
Day 17	8.15 am -9.15 am	Closure session - Reflections by students on what it means to be a patient	Dr. R. Shanmugasundaram, Prof, Medicine
	9.15 am -10.15 am	Closure session - Reflections by students on what it means to be a patient	Dr. R. Shanmugasundaram, Prof, Medicine
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Small group discussion by students on Doctor-patient relationship	Dr. R. Shanmugasundaram, Prof, Medicine
	11.30 – 12.30 pm	Small group discussion by students on Doctor-patient relationship	Dr. R. Shanmugasundaram, Prof, Medicine
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Film clips on poor DP relationships	Dr. R. Shanmugasundaram, Prof, Medicine
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Dr. Jaya Prakash, Assistant Prof., Ophthalmology
Day 18	8.15 am -9.15 am	Students seminar on expectations by family, society, patients from doctors	Dr. J. Sridhar, Prof. & HOD, Surgery & Faculty, Dept of Surgery
	9.15 am -10.15 am	Students seminar on expectations by family, society, patients from doctors	Dr. J. Sridhar, Prof. & HOD, Surgery & Faculty, Dept of Surgery
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Students seminar on expectations by them from family, society, patients	Dr. J. Sridhar, Prof. & HOD, Surgery & Faculty, Dept of Surgery
	11.30 – 12.30 pm	Students seminar on expectations by them from family, society, patients	Dr. J. Sridhar, Prof. & HOD, Surgery & Faculty, Dept of Surgery
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Students reflections on the sacrifices they are ready to make to meet their own & society's expectations	Dr. J. Sridhar, Prof. & HOD, Surgery & Faculty, Dept of Surgery
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Dr. Preethi, ARMO

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
Day 19	8.15 am -9.15 am	Field visit to rural health centres by CM Department	Faculty of CM
	9.15 am -10.15 am	Field visit to rural health centres by CM Department	Faculty of CM
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Field visit to rural health centres by CM Department	Faculty of CM
	11.30 – 12.30 pm	Field visit to rural health centres by CM Department	Faculty of CM
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	English language Program -Introduction to Swayam Prabha TV Channel	Dr. Vijayasamundeeswari, Associate Prof., Biochemistry
	2.15 pm -4.15 pm	Leisure activities - Books/fine arts/theatre	Dr. Saravana Bhava, Associate Prof., Ophthalmology
Day 20	8.15 am -9.15 am	Computer skills for medical profession	Dr. Gowri Shankar, Associate Prof., Pathology & Dr. Anbu Lenin, Assistant Prof., Pathology
	9.15 am -10.15 am	Computer skills for medical profession	Dr. Gowri Shankar, Associate Prof., Pathology & Dr. Anbu Lenin, Assistant Prof., Pathology
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	SDL - Computer skills	Faculty, Dept. Of Pathology
	11.30 – 12.30 pm	SDL - Computer skills	Faculty, Dept. Of Pathology
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	SDL - Computer skills	Faculty, Dept. Of Pathology
	2.15 pm -4.15 pm	Local language programme - SDL	Dr. Siva Sankari, Associate Prof., Pharmacology
Day 21	8.15 am -9.15 am	SDL - Computer skills	Faculty, Dept. Of Pathology
	9.15 am -10.15 am	SDL - Computer skills	Faculty, Dept. Of Pathology
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	SDL - Computer skills	Faculty, Dept. Of Pathology
	11.30 – 12.30 pm	SDL - Computer skills	Faculty, Dept. Of Pathology

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	SDL - Computer skills	Faculty, Dept. Of Pathology
	2.15 pm -4.15 pm	Local language programme - SDL	Mrs. Vanaja Priya, Tutor, Microbiology
Day 22	8.15 am -9.15 am	Visit to skills lab	Dr. Deepti Shastri, Prof. & HOD, Anatomy
	9.15 am -10.15 am	Visit to skills lab	Faculty, Dept. Of Anaesthesia
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Basic life support - Demonstration	Faculty, Dept. Of Anaesthesia
	11.30 – 12.30 pm	Basic life support - Demonstration	Faculty, Dept. Of Anaesthesia
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	Hands-on experience in skills lab	Faculty, Dept. Of Anaesthesia
	2.15 pm -4.15 pm	Hands-on experience in skills lab	Faculty, Dept. Of Anaesthesia
Day 23	8.15 am -9.15 am	Hands-on experience in skills lab	Faculty, Dept. Of Anaesthesia
	9.15 am -10.15 am	Hands-on experience in skills lab	Faculty, Dept. Of Anaesthesia
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	Hands-on experience in skills lab	Faculty, Dept. Of Anaesthesia
	11.30 – 12.30 pm	First aid - short films	RMO/ARMO
	12.30 pm -1.15 pm	Lunch break	
	1.15 – 2.15 pm	First aid - demonstration	RMO/ARMO
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Dr. Jaya Prakash, Students amenities incharge
Day 24	8.15 am -9.15 am	First aid practice sessions in skills lab	Faculty, Dept. Of Anaesthesia
	9.15 am -10.15 am	First aid practice sessions in skills lab	Faculty, Dept. Of Anaesthesia
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	English language program- Swayam Prabha	Dr. R. Vinodhini, Tutor, Anatomy
	11.30 – 12.30 pm	SDL - English	Dr. Waheeda, Assistant Prof, Physiology
	12.30 pm -1.15 pm	Lunch break	
	1.15 pm – 2.15 pm	SDL - English	Dr. Rajeswari, Tutor, Biochemistry
	2.15 pm -4.15 pm	Sports - Outdoor /Indoor games	Dr. G. Panneer Selvi, Tutor, Anatomy

<b>Date</b>	<b>Time</b>	<b>Topics</b>	<b>Speaker/Faculty</b>
Day 25	8.15 am -9.15 am	Talk by academic toppers of previous years	Dr. B. Evangeline Jones & Faculty, Dept of Biochemistry
	9.15 am -10.15 am	Talk by academic toppers of previous years	Dr. B. Evangeline Jones & Faculty, Dept of Biochemistry
	10.15 am -10.30 am	Tea break	
	10.30 – 11.30 pm	White coat ceremony	Faculty of preclinical departments
	11.30 – 12.30 pm	White coat ceremony	Faculty of preclinical departments
	12.30 pm -1.15 pm	Lunch break	
	1.15 pm – 4.15 pm	Medical Check up	Clinical Faculty of all the relevant departments Dr. Arunan Periasamy, Tutor, Biochemistry

# Vinayaka Mission`s Kirupananda Variyar Medical College & Hospitals, Salem-636 308.

Vinayaka Mission`s Research Foundation (Deemed to be University)

## Class Time Table - I MBBS 2019 - 2020

Day	8.15-9.15 AM	9.15-10.15 AM	10.15 -10.3 0 AM	10.30 AM -11.30 AM	11.30 AM -12.30 PM	12.30 - 1.15 PM	1.15-2.15 PM	2.15 - 4.15 PM	4.15 - 5.15 PM
<b>Monday</b>	# Anatomy (Theory) / (Formative Assessment & Feedback – Ana/Bio)	Physiology (Theory)	Tea Break	Anatomy (Dissection)	Anatomy (Dissection)	Lunch Break	Physiology (Tutorial)	Physiology / Biochemistry (Practical)	-
<b>Tuesday</b>	Biochemistry (Theory)	## Physiology (Theory) / (Formative Assessment & Feedback)		Anatomy (Dissection)	Anatomy (Dissection)		Anatomy (Theory)	Anatomy / Physiology (Practical)	-
<b>Wednesday</b>	* Physiology (SDL/SGT)	# Biochemistry (Theory) / (Formative Assessment & Feedback)		Anatomy (Theory)	Anatomy (Dissection)		Physiology Tutorial / IGL	Physiology / Biochemistry (Practical)	-
<b>Thursday</b>	Physiology (Theory)	Biochemistry Tutorial / SDL		Anatomy Tutorial / IGL	Anatomy (SDL)		### Community Medicine Theory / Tutorial / IGL	Anatomy / Physiology (Practical)	Sports
<b>Friday</b>	Anatomy (Theory)	Physiology (Theory)		** Anatomy (Dissection) / Physiology (Tutorial)	Anatomy (Dissection)		***Community Medicine SGT / SDL	****Biochemistry SGT / ECE	Extracurricular activities
<b>Saturday</b>	Anatomy (Theory)	Anatomy (Theory)		Anatomy (SGT)	Physiology (SGT)		***** Biochemistry SGT / IGL / ECE		
							I Saturday - ECE Anatomy III Saturday - ECE Physiology IV Saturday - Professional Development Programme		-

# 1<sup>st</sup> & 3<sup>rd</sup> weeks Anatomy Theory, 2<sup>nd</sup> week Anatomy (Ana) Formative assessment & Feedback and 4<sup>th</sup> week Biochemistry(Bio) Formative assessment & Feedback

## 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> weeks Physiology Theory and 4<sup>th</sup> week Physiology Formative assessment & Feedback

\* Physiology SDL - September 2019 to March 2020; SGT – April 2020 to August 2020

\*\* Physiology Tutorials - From September 2019 to December 2019  
Anatomy Dissection - From January 2020 to August 2020

\*\*\* Community Medicine - September 2019 to November 2019 (1<sup>st</sup> & 2<sup>nd</sup> week - SGT ; 3<sup>rd</sup> & 4<sup>th</sup> week - SDL)

\*\*\*\* Biochemistry SGT - September 2019 to November 2019 (1<sup>st</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Fridays)  
Biochemistry ECE - September 2019 to November 2019 (2<sup>nd</sup> Friday)

\*\*\*\*\* Biochemistry SGT - December 2019 to August 2020 (1<sup>st</sup> & 3<sup>rd</sup> Fridays)  
Biochemistry IGL - December 2019 to August 2020 (4<sup>th</sup> Friday)  
Biochemistry ECE - December 2019 to August 2020 (2<sup>nd</sup> Friday)

**Note: ECE – Early Clinical Exposure; SDL – Self Directed Learning; SGT – Small Group Teaching; IGL – Integrated Learning**

## SYSTEM-BASED CONTENT

MODULE	SECTION	DEPT.	NAME OF THE MODULE/DESCRIPTION
1	<b>GENERAL MODULE</b>		
	<b>1.1</b>	<b>ANATOMY</b>	<b>GENERAL ANATOMY</b>
		<b>1.1.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Introduction to Anatomy &amp; general anatomical terms</li> <li>● Introduction to Bones</li> <li>● Introduction to Joints</li> <li>● Introduction to Muscular system</li> <li>● Introduction to Vascular system</li> <li>● Introduction to Lymphatic system</li> <li>● Introduction to Nervous System</li> <li>● Introduction to Integumentary System</li> </ul>
		<b>1.1.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Types of cartilage</li> <li>● Types Epiphysis</li> <li>● End arteries</li> </ul>
		<b>1.1.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Terms of anatomical position &amp; movement, body planes</li> <li>● Skeletal system</li> <li>● Muscular system</li> <li>● Nervous system</li> <li>● Vascular system</li> <li>● Lymphatic system</li> </ul>
		<b>1.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to hospital ward/ OPD &amp; OT</li> <li>● Reflections on hospital visit</li> </ul>
	<b>1.2</b>	<b>PHYSIOLOGY</b>	<b>GENERAL PHYSIOLOGY</b>
		<b>1.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Importance of Physiology in medicine</li> <li>● Functional organization of human body, Principles of Homeostasis and physiological control mechanism</li> <li>● Cytoskeleton, molecular motors, intercellular connections and communications, apoptosis</li> <li>● Transport across cell membrane</li> <li>● Body fluids: Principles and methods of measurement of body fluid compartments</li> </ul>
		<b>1.2.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Functional organization of Cell and its organelles</li> </ul>
		<b>1.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Introduction to hematology practical</li> <li>● Microscopy and collection of blood samples</li> </ul>
		<b>1.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Demonstration of Edema</li> <li>● Fluid replacement in dehydrated patients</li> <li>●</li> </ul>
	<b>1.3</b>	<b>BIOCHEMISTRY</b>	<b>GENERAL BIOCHEMISTRY</b>
		<b>1.3.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Cell structure and function</li> <li>● Chemistry of carbohydrates / lipids / proteins</li> <li>● Plasma Proteins</li> <li>● Biological oxidation and ATP synthesis</li> <li>● Enzyme classification, kinetics, Inhibition and regulation of enzyme activity,</li> </ul>

			Co enzymes and Isoenzymes.
		<b>1.3.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Protein folding and Protein conformation diseases</li> <li>● Enzymes in clinical diagnosis</li> </ul>
		<b>1.3.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Color reactions of carbohydrates</li> <li>● Color reactions of proteins</li> </ul>
		<b>1.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to clinical lab</li> </ul>
<b>2</b>	<b>GENERAL EMBRYOLOGY, GENETICS, GENERAL HISTOLOGY, HEMATOLOGICAL SYSTEM &amp; IMMUNOLOGICAL SYSTEM</b>		
	<b>2.1</b>	<b>ANATOMY</b>	<b>GENERAL EMBRYOLOGY, GENETICS &amp; GENERAL HISTOLOGY</b>
		<b>2.1.1 (Theory)</b>	<b>GENERALEMBRYOLOGY</b> <ul style="list-style-type: none"> <li>● Spermatogenesis</li> <li>● Oogenesis</li> <li>● Fertilization</li> <li>● Cleavage, blastocyst formation, implantation</li> <li>● Germ disc</li> <li>● Primitive streak and intraembryonic mesoderm</li> <li>● Notochord, neural tube formation</li> <li>● Connecting stalk, allantoic diverticulum, folding of embryo</li> <li>● Placenta &amp; umbilicalcord</li> <li>● Twinning &amp;teratogens</li> </ul> <b>GENETICS</b> <ul style="list-style-type: none"> <li>● Structural aberrations ofchromosomes</li> <li>● Chromosomes &amp; Karyotyping</li> <li>● Chromosomal Abnormalities</li> <li>● Modes of Inheritance</li> <li>● Gene Structure and Mutation</li> <li>● Prenatal diagnosis &amp; Genetic counselling</li> </ul>
		<b>2.1.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Barr Body</li> <li>● Down's, Turner's, Edward's. Klinefelter's, Patau's Syndrome</li> </ul>
		<b>2.1.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Demonstration of embryology charts</li> </ul>
		<b>2.1.4 (Theory &amp;Practical)</b>	<b>General Histology:</b> <ul style="list-style-type: none"> <li>● Epithelialtissue (simple &amp; stratified)</li> <li>● Connectivetissue</li> <li>● Cartilage</li> <li>● Bone</li> <li>● Muscular tissue</li> <li>● Nervous tissueincludingautonomicganglia</li> <li>● Bloodvessels</li> <li>● Lymphatic tissue</li> <li>● Integumentary system</li> </ul>
		<b>2.1.5 (SDL)</b>	<ul style="list-style-type: none"> <li>● Microscope</li> <li>● Types of cell junctions</li> <li>● Cells of connective tissue</li> </ul>
		<b>2.1.6 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to bedside microbiology/pathology labs in hospital wards</li> </ul>

	<b>2.2</b>	<b>PHYSIOLOGY</b>	<b>HEMATOLOGY &amp; IMMUNOLOGY</b>
		<b>2.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>• Composition and functions of blood, Plasma proteins</li> <li>• Erythropoiesis: Sites, stages, regulation</li> <li>• Hb – structure, types and function, fate, Jaundice</li> <li>• PCV, ESR, Red cell indices, Osmotic fragility</li> <li>• Anemia: Classification, Physiological basis of investigations</li> <li>• WBCs: Leucopoiesis, functions- Neutrophils &amp; inflammation</li> <li>• RE system, Basophils &amp; Eosinophils</li> <li>• Immunity: Classification, development, Cell mediated immunity</li> <li>• Humoral immunity: Antibody formation, structure, types, action</li> <li>• Immunity Applied: Immune tolerance, Autoimmunity, Immunodeficiency etc</li> <li>• Platelets-morphology, functions, thrombopoiesis, variations, Hemostasis</li> <li>• Blood coagulation-clotting factors, mechanism, clot retraction &amp; clot lysis</li> <li>• Bleeding disorders and anticoagulants</li> <li>• Blood groups-ABO and Rh system</li> <li>• Physiological basis of blood transfusion and its hazards</li> </ul>
		<b>2.2.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Red Blood Cell – Structure, Functions and fate of RBC</li> <li>• Lymphoid organs and Lymph</li> </ul>
		<b>2.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Hb estimation</li> <li>• Hemocytometry</li> <li>• RBC Count</li> <li>• ESR and PCV</li> <li>• Osmotic fragility &amp; specific gravity</li> <li>• TLC</li> <li>• DLC</li> <li>• Blood Group,</li> <li>• BT, CT</li> <li>• Absolute eosinophil count</li> </ul>
		<b>2.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to blood bank</li> <li>• Visit to central lab to observe collection of blood &amp; CBC procedure</li> </ul>
	<b>2.3</b>	<b>BIOCHEMISTRY</b>	<b>HEMATOLOGY &amp; IMMUNOLOGY</b>
		<b>2.3.1 (Theory)</b>	<ul style="list-style-type: none"> <li>• Hemoglobin; Structure and function</li> <li>• Heme- Synthesis, Catabolism and disorders</li> <li>• Hematopoietic Vitamins: B6, B12, Folic Acid, Iron Metabolism</li> <li>• Hemoglobinopathies</li> </ul>
		<b>2.3.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Immunoglobulins: Structure and types</li> <li>• Biochemistry of AIDS</li> <li>• Biochemical Investigations in Anemia</li> </ul>
		<b>2.3.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Colorimetry</li> <li>• Demonstration of Immunological techniques (ELISA,</li> </ul>



			FIA)
		<b>2.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Anemia – A Case discussion</li> <li>• Hemoglobinopathies-Clinical presentations, Videos,</li> <li>• Porphyrias – Case report , pictures</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>• The cadaver as our first teacher</li> </ul>
<b>3</b>	<b>LOCOMOTOR SYSTEM &amp; AUTONOMIC NERVOUS SYSTEM</b>		
	<b>3.1</b>	<b>ANATOMY</b>	<b>LOCOMOTOR SYSTEM</b>
		<b>3.1.1 (Theory)</b>	<p><b>LOCOMOTOR SYSTEM – Upper Limb</b></p> <ul style="list-style-type: none"> <li>• Axilla&amp; Axillary artery in detail</li> <li>• Brachial plexus</li> <li>• Deltoid intermuscular spaces,</li> <li>• Shoulder joint</li> <li>• Elbow joint</li> <li>• Radioulnar joints : superior, middle and inferior</li> <li>• Flexor retinaculum and extensor retinaculum</li> <li>• Spaces in the hand</li> <li>• Nerves of upperlimb - median, ulnar, radial</li> </ul> <p><b>LOCOMOTOR SYSTEM – Lower Limb</b></p> <ul style="list-style-type: none"> <li>• Venous drainage of lower limb</li> <li>• Femoral triangle including femoral sheath</li> <li>• Femoral artery and femoral nerve</li> <li>• Gluteal muscles and structures under cover of gluteus maximus</li> <li>• Hip joint</li> <li>• Sciatic nerve</li> <li>• Common peroneal, deep peroneal &amp; superficial peroneal nerves</li> <li>• Kneejoint</li> <li>• Ankle joint</li> <li>• Arches offoot</li> </ul>
		<b>3.1.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Anastamosis around scapula</li> <li>• Anastomosis around elbow joint</li> <li>• Venous &amp; lymphatic drainage of upperlimb</li> <li>• Venous &amp; lymphatic drainage of upperlimb</li> <li>• Anastomosis around knee joint</li> <li>• Gait cycle</li> </ul>

		<b>3.1.3 (Practical)</b>	<p><b>LOCOMOTOR SYSTEM – Upper Limb</b></p> <p>Dissection:</p> <ul style="list-style-type: none"> <li>● Pectoralregion</li> <li>● Axilla</li> <li>● Scapularregion</li> <li>● Arm</li> <li>● Forearm</li> <li>● Hand</li> </ul> <p>Osteology:</p> <ul style="list-style-type: none"> <li>● Clavicle</li> <li>● Scapula</li> <li>● Humerus</li> <li>● Radius</li> <li>● Ulna</li> <li>● Articulatedhand</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>● Surface anatomy &amp; radiology</li> </ul> <p><b>LOCOMOTOR SYSTEM – Lower Limb</b></p> <p>Dissection:</p> <ul style="list-style-type: none"> <li>● Front ofthigh</li> <li>● Adductorcompartment</li> <li>● Glutealregion</li> <li>● Posterior compartment of thigh</li> <li>● Poplitealfossa</li> <li>● Anterior &amp; lateral compartment of leg and dorsum offoot</li> <li>● Posterior compartment of leg &amp; retinacula aroundankle</li> </ul>
			<ul style="list-style-type: none"> <li>● Sole</li> </ul> <p>Osteology:</p> <ul style="list-style-type: none"> <li>● Hip bone</li> <li>● Femur</li> <li>● Patella</li> <li>● Tibia</li> <li>● Fibula</li> <li>● Foot</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>● Surface anatomy &amp; radiology</li> </ul>
		<b>3.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to radiology department - Observe use of X-ray machine &amp; Read normal Xrays</li> <li>● Visit to Orthopedics department - Observe patients with fractures &amp; dislocations</li> </ul>
	<b>3.2</b>	<b>PHYSIOLOGY</b>	<b>LOCOMOTOR SYSTEM &amp; AUTONOMIC NERVOUS SYSTEM</b>
		<b>3.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Resting Membrane Potential</li> <li>● Action potential</li> <li>● Neuron, Nerve,</li> <li>● Neuromuscular junction</li> <li>● Skeletal Muscle</li> </ul>

			<ul style="list-style-type: none"> <li>• Smooth muscle</li> <li>• Autonomic nervous system : functional organization</li> <li>• Sympathetic and para sympathetic systems</li> <li>• Autonomic function tests</li> </ul>
		<b>3.2.2 (SDL)</b>	<ul style="list-style-type: none"> <li>• Dysfunctions of autonomic nervous system</li> </ul>
		<b>3.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Demo of autonomic function tests</li> </ul>
		<b>3.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Nerve conduction test and Surface EMG recording in Neurology department</li> </ul>
	<b>3.3</b>	<b>BIOCHEMISTRY</b>	<b>LOCOMOTOR SYSTEM &amp; AUTONOMIC NERVOUS SYSTEM</b>
		<b>3.3.1 Theory</b>	<ul style="list-style-type: none"> <li>• Minerals: Calcium, Phosphorus, Magnesium</li> <li>• Vitamins: Vitamin D and pantothenic acid</li> <li>• Rickets, Fanconisyndrome</li> </ul>
		<b>3.3.2 Theory SDL</b>	<ul style="list-style-type: none"> <li>• Disorders of muscles: Muscular dystrophy, malignant hyperthermia</li> </ul>
		<b>3.3.3 Practical</b>	<ul style="list-style-type: none"> <li>• Demonstration - Estimation of calcium and Phosphorus</li> </ul>
		<b>3.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Osteo arthritis and Osteoporosis</li> <li>• Rickets – Clinical Presentation ,pictures &amp; X rays</li> <li>• Flurosis –Clinical Presentation, pictures</li> <li>• Collagen Vascular disorders – Case report , pictures</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>• The Foundations of Communication - I</li> </ul>
<b>4</b>	<b>CARDIOVASCULAR SYSTEM</b>		
	<b>4.1</b>	<b>ANATOMY</b>	<b>CARDIOVASCULAR SYSTEM (Thorax)</b>
		<b>4.1.1 ( Theory )</b>	<ul style="list-style-type: none"> <li>• Thoracic wall</li> <li>• Mediastinum</li> <li>• Pericardium and External features of the Heart</li> <li>• Chambers of heart</li> <li>• Blood supply to heart</li> <li>• Arch of aorta</li> <li>• Azygous vein &amp; thoracic duct</li> <li>• Development of heart, aortic arch arteries, superior &amp; inferior vena cava</li> </ul>
		<b>4.1.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Referred pain from heart</li> <li>• Fetal circulation</li> <li>• Structure of valves of the heart</li> </ul>

		<b>4.1.3 ( Practical)</b>	<p>Dissection:</p> <ul style="list-style-type: none"> <li>• Thoracic wall</li> <li>• Location of heart, pericardium and pericardial sinuses</li> <li>• External features of heart, blood vessels of the heart</li> <li>• Internal features of chambers of the heart</li> <li>• Superior mediastinum &amp; Posterior mediastinum</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>• Embryology charts - Development of interatrial &amp; interventricular septae &amp; superior vena cava</li> <li>• Surface anatomy - Heart &amp; valves <ul style="list-style-type: none"> <li>• Radiological anatomy - Chest x-ray (mediastinum)</li> </ul> </li> </ul>
		<b>4.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to Radiology department - Angiogram</li> </ul>
	<b>4.2</b>	<b>PHYSIOLOGY</b>	<b>CARDIOVASCULAR SYSTEM</b>
		<b>4.2.1 ( Theory )</b>	<ul style="list-style-type: none"> <li>• Cardiac muscle: Structure, Properties</li> <li>• Conducting system of heart</li> <li>• Electrocardiogram: Leads, Waves, Intervals, Segments Vector, Applied aspect</li> <li>• Cardiac cycle</li> <li>• Heart rate &amp; its regulation</li> <li>• Hemodynamics</li> <li>• Cardiac output: Definition, Normal values, Factors affecting, Measurement, Regulation</li> <li>• Blood pressure-Definition, normal volumes, variations and its measurement, Regulation &amp; applied aspects</li> <li>• Coronary circulation</li> <li>• Cerebral, Cutaneous &amp; Splanchnic circulation</li> <li>• Shock</li> </ul>
		<b>4.2.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Functional anatomy of heart</li> <li>• JVP and heart sounds</li> <li>• Physiology of blood vessels</li> <li>• Fetal circulation</li> <li>• Skeletal muscle circulation</li> </ul>
		<b>4.2.3 ( Practical)</b>	<ul style="list-style-type: none"> <li>• Examination of peripheral pulses &amp; recording of BP</li> <li>• Demo- ECG</li> <li>• Effect of posture on BP</li> <li>• Effect of exercise on BP</li> <li>• Examination of cardiovascular system</li> </ul>
		<b>4.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to medicine department to observe cardiac investigations- ECG, Echocardiogram, treadmill test</li> <li>• Visit to medicine department to examine patients with cardiovascular diseases</li> </ul>
	<b>4.3</b>	<b>BIOCHEMISTRY</b>	<b>CARDIOVASCULAR SYSTEM</b>
		<b>4.3.1 ( Theory )</b>	<ul style="list-style-type: none"> <li>• Collagen – structure, disorders</li> <li>• Lipid metabolism, prostaglandins</li> <li>• Sulphur containing Amino acids, Homocysteine metabolism and disorders, Arginine</li> <li>• Vitamins : C &amp; K</li> <li>• Free radicals and antioxidants</li> <li>• Interpretation of lipid profile</li> </ul>

		<b>4.3.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Collagen Vascular disorders</li> <li>• Hyperlipoproteinemias, metabolic syndrome</li> </ul>
		<b>4.3.3 ( Practical)</b>	<ul style="list-style-type: none"> <li>• Demonstration of Estimation of cholesterol and Troponin T</li> </ul>
		<b>4.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Hyper Tension</li> <li>• Obesity</li> <li>• Cardio Vascular diseases</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>• Consumer Protection Act related to Medical Profession</li> <li>• Medical negligence and doctor's liability</li> </ul>
<b>5</b>	<b>RESPIRATORY SYSTEM</b>		
	<b>5.1</b>	<b>ANATOMY</b>	<b>RESPIRATORY SYSTEM</b>
		<b>5.1.1 (Theory)</b>	<ul style="list-style-type: none"> <li>• Thoracic inlet</li> <li>• Intercostal space including intercostal muscles, nerves and vessels</li> <li>• Lungs including bronchopulmonary segments</li> <li>• Diaphragm</li> <li>• Nasal cavity including lateral wall of nose &amp; nasal septum</li> <li>• Paranasal air sinuses</li> <li>• Interior of Larynx</li> <li>• Development of respiratory system</li> </ul>
		<b>5.1.2 (Theory &amp; SDL)</b>	<ul style="list-style-type: none"> <li>• Trachea</li> <li>• Cross sectional anatomy of thorax at T<sub>4</sub>-T<sub>5</sub> level</li> <li>• Development of diaphragm</li> </ul>
		<b>5.1.3 (Practical)</b>	<p>Osteology:</p> <ul style="list-style-type: none"> <li>• Thoracic vertebra</li> <li>• Sternum</li> <li>• Ribs</li> </ul> <p>Dissection:</p> <ul style="list-style-type: none"> <li>• Thoracic cage, inlet, outlet, intercostal space</li> <li>• Intercostal muscles, nerves and vessels</li> <li>• Diaphragm</li> <li>• Pleura</li> <li>• Lungs</li> <li>• Nasal cavity &amp; nasopharynx</li> <li>• Larynx &amp; trachea</li> </ul> <p>Systemic Histology:</p> <ul style="list-style-type: none"> <li>• Histology of trachea &amp; lung</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>• Radiological anatomy of Head &amp; neck - nasal cavity, paranasal sinuses, larynx &amp; trachea</li> <li>• Chest x-ray</li> <li>• Surface anatomy of respiratory system</li> </ul>
		<b>5.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Watch video of patient with respiratory disorders</li> <li>• Department of pulmonology - Pleural effusion/pleural tap</li> </ul>

	<b>5.2</b>	<b>PHYSIOLOGY</b>	<b>RESPIRATORY SYSTEM</b>
		<b>5.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Functional anatomy, non respiratory functions of lung</li> <li>● Mechanics of respiration: Muscles, Respiratory pressures</li> <li>● Compliance, Surfactant, airway resistance &amp; work of breathing</li> <li>● Dead space, Alveolar ventilation, Gas exchange across respiratory membrane</li> <li>● Pulmonary circulation ,V/Q ratio</li> <li>● Transport of oxygen and carbon dioxide</li> <li>● Neural regulation of respiration</li> <li>● Chemical and non chemical regulation of respiration</li> <li>● Hypoxia, Cyanosis, High altitude physiology</li> <li>● Deep sea physiology</li> <li>● Application of pulmonary function tests in various diseases</li> <li>● Cardiorespiratory changes during exercise, O<sub>2</sub> debt</li> </ul>
		<b>5.2.2 (Theory &amp; SDL)</b>	<ul style="list-style-type: none"> <li>● Lung volumes &amp; capacities</li> <li>● Lung function tests: Classification &amp; methods</li> <li>● Oxygen therapy</li> <li>● Abnormal respiration</li> <li>● Assisted ventilation &amp; CPR</li> </ul>
		<b>5.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Stethography</li> <li>● Spirometry</li> <li>● Clinical Examination of RS</li> </ul>
		<b>5.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to PFT lab</li> <li>● Visit to medicine department</li> </ul>
	<b>5.2</b>	<b>BIOCHEMISTRY</b>	<b>RESPIRATORY SYSTEM</b>
		<b>5.3.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● General aspects of acid base balance, Buffers, Respiratory regulation of blood pH and related disorders</li> </ul>
		<b>5.3.2 (Theory &amp; SDL)</b>	<ul style="list-style-type: none"> <li>● Interpretation of acid based disorders</li> </ul>
		<b>5.3.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Demonstration of pH meter, pH indicator</li> </ul>
		<b>5.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● COPD</li> </ul>
		<b>AETCOM / Professional Development Programme.</b>	Medical Records Department & Hospital Information System - Documentation of patient information

<b>6</b>	<b>ENDOCRINE SYSTEM</b>		
	<b>6.1</b>	<b>ANATOMY</b>	<b>ENDOCRINE SYSTEM</b>
		<b>6.1.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Pituitary gland- Gross anatomy &amp; microscopic anatomy</li> <li>● Thyroid and parathyroid - Gross anatomy, microscopic anatomy &amp; development</li> <li>● Adrenal gland - Gross anatomy, microscopic anatomy &amp; development</li> </ul>
		<b>6.1.2 (Theory &amp;SDL)</b>	<ul style="list-style-type: none"> <li>● Developmental of pituitary gland</li> <li>● Congenital anomalies of thyroid gland, DiGeorge syndrome, Waardenberg's syndrome</li> </ul>
		<b>6.1.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● Demonstration of gross specimen of pituitary, thyroid, parathyroid &amp; adrenal glands</li> <li>● Demonstration of embryology charts - Development of thyroid, parathyroid, adrenal medulla (neural crest)</li> <li>● Histology - pituitary, thyroid and parathyroid and adrenal glands</li> </ul>
		<b>6.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Visit to surgery ward - Patients with thyroid swelling OR</li> <li>● Video - Goitre/Thyroidectomy</li> </ul>
	<b>6.2</b>	<b>PHYSIOLOGY</b>	<b>ENDOCRINE SYSTEM</b>
		<b>6.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Mechanism of hormone action</li> <li>● Pituitary gland &amp; Hypothalamus, Hypothalamo-hypophyseal axis.</li> <li>● Growth hormone</li> <li>● Posterior pituitary hormones</li> <li>● Thyroid hormones: Synthesis, Secretion, Transport</li> <li>● Thyroid hormones: Actions, Regulation</li> <li>● Applied aspects of thyroid</li> <li>● Adrenocortical hormones: Biosynthesis. Actions &amp; regulation of mineralocorticoids</li> <li>● Glucocorticoids: Actions, Regulation, Applied aspects</li> <li>● Endocrine pancreas: Insulin- Secretion, Actions, Regulation</li> <li>● Glucagon, Regulation of blood glucose level, Applied aspects of endocrine pancreas</li> <li>● Regulation of serum calcium level: Parathormone</li> <li>● Calcitonin, calcitriol, Applied aspects</li> <li>● Endocrine, function of kidney, pineal gland and heart</li> </ul>
		<b>6.2.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Introduction and General Principles of regulation of endocrine secretions</li> <li>● Thyroid function tests</li> <li>● Adrenomedullary hormones – Biosynthesis, Functions and Regulation of secretion</li> <li>● Local hormones</li> </ul>
		<b>6.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>● CVS and RS practicals will be taken during these 3 weeks Time</li> </ul>

		<b>6.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to medicine department to demonstrate features of various endocrine disorders.</li> </ul>
	<b>6.3</b>	<b>BIOCHEMISTRY</b>	<b>ENDOCRINE SYSTEM</b>
		<b>6.3.1 (Theory)</b>	<ul style="list-style-type: none"> <li>• Carbohydrate Metabolism: Glycolysis, fate of Pyruvate , TCA cycle</li> <li>• Gluconeogenesis, Glycogenesis, Glycogenolysis,</li> <li>• Regulation of blood glucose,</li> <li>• Metabolism instarvation and fed state</li> <li>• Mechanism of Hormone action</li> <li>• Thyroid function tests,</li> <li>• Adrenocortical functiontests,</li> <li>• Diabetes mellitus</li> <li>• OGTT</li> </ul>
		<b>6.3.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Lab diagnosis of Diabetes Mellitus</li> <li>• Interpretation of thyroid and adrenal functiontest</li> </ul>
		<b>6.3.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Blood Glucose Estimation</li> <li>• Demonstration of Glucometer</li> </ul>
		<b>6.3.4(ECE)</b>	<ul style="list-style-type: none"> <li>• Endocrine disorders Part I – Case report, Videos</li> <li>• Endocrine disorders Part II – Case report, Videos</li> <li>• Diabetes Mellitus</li> <li>• Gestational diabetes Mellitus</li> <li>• Thyroid swelling</li> </ul>
		<b>Integrated Teaching</b>	<ul style="list-style-type: none"> <li>• VIN MANTRA (Vinayaka Module for Academic Networking and Training) : Self directed and peer learning – Session I – Thyroid disorders</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>• Teamwork &amp; Leadership</li> <li>• Career Guidance</li> </ul>
<b>7</b>	<b>SPECIAL SENSES, CENTRAL NERVOUS SYSTEM</b>		
	<b>7.1</b>	<b>ANATOMY</b>	<b>HEAD &amp; NECK, SPECIAL SENSES, CENTRAL NERVOUS SYSTEM</b>
		<b>7.1.1 Theory</b>	<p>Gross Anatomy:</p> <ul style="list-style-type: none"> <li>• Scalp</li> <li>• Muscles of face</li> <li>• Posterior Triangle ofneck</li> <li>• Anterior Triangle ofneck including digastric &amp; carotid triangles</li> <li>• Meninges</li> <li>• Dural venoussinuses with cavernoussinus in detail</li> <li>• Cranial nerves - VII &amp; IX in detail</li> <li>• Parotidgland</li> <li>• Temporomandibularjoint</li> <li>• Submandibulargland</li> <li>• Pharynx</li> </ul> <p>Systemic Embryology:</p> <ul style="list-style-type: none"> <li>• Development of Pharyngealapparatus - I</li> <li>• Pharyngeal apparatus - II including pharyngeal arch arteries</li> </ul>



			<ul style="list-style-type: none"> <li>● Development of face</li> <li>● Development of palate</li> </ul> <p>Systemic histology:</p> <ul style="list-style-type: none"> <li>● Salivary glands: serous, mucous, mixed</li> </ul> <p><b>Special senses:</b></p> <ul style="list-style-type: none"> <li>● Tongue - Gross, histology &amp; development</li> <li>● Eyeball - Histology of cornea &amp; retina</li> <li>● Extraocular muscles</li> <li>● External ear and middle ear - Gross &amp; development</li> <li>● Internal ear</li> <li>● Development of eye</li> </ul> <p><b>Central nervous system:</b></p> <ul style="list-style-type: none"> <li>● Spinal cord</li> <li>● Medulla</li> <li>● Pons</li> <li>● Midbrain</li> <li>● Cerebellum</li> <li>● Ventricles of brain - IV ventricle &amp; lateral ventricles in detail</li> <li>● Basal ganglia &amp; limbic system</li> <li>● Cerebrum - Sulci/gyri/lobes/functional areas</li> <li>● White matter of cerebrum with internal capsule in detail</li> <li>● Blood supply of brain &amp; spinal cord, Circle of Willis</li> <li>● Development of Nervous system</li> </ul>
		<p><b>7.1.2</b> <b>(Theory SDL)</b></p>	<ul style="list-style-type: none"> <li>● Parasympathetic ganglia - ciliary, otic, submandibular, pterygopalatine</li> <li>● Lacrimal apparatus</li> <li>● Bell's palsy</li> <li>● Lymphatic drainage of neck</li> <li>● Fascial spaces in the neck</li> <li>● Lumbar puncture</li> <li>● Thalamus &amp; hypothalamus</li> </ul>

		<p><b>7.1.3 (Practical)</b></p>	<p>Dissection:</p> <p><b>Head &amp; Neck</b></p> <ul style="list-style-type: none"> <li>● Scalp</li> <li>● Face-Muscles, vessels &amp; Nerves</li> <li>● Triangles of neck</li> <li>● Cranial cavity</li> <li>● Deep dissection of neck</li> <li>● Parotid region</li> <li>● Infratemporal fossa &amp; muscles of mastication</li> <li>● Submandibular region</li> <li>● Pharynx</li> </ul> <p><b>Special senses</b></p> <ul style="list-style-type: none"> <li>● Tongue</li> <li>● Orbit</li> <li>● Eyeball</li> <li>● Ear</li> </ul>
			<p><b>Central Nervous System</b></p> <ul style="list-style-type: none"> <li>● Spinal cord</li> <li>● Brainstem</li> <li>● Cerebellum</li> <li>● Ventricles of brain</li> <li>● Thalamus &amp; hypothalamus</li> <li>● Basal ganglia &amp; limbic system</li> <li>● Cerebrum</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>● Radiology &amp; Surface Anatomy of head &amp; neck and CNS</li> </ul> <p>Osteology:</p> <ul style="list-style-type: none"> <li>● Skull - Normas, Cranial cavity</li> <li>● Mandible</li> <li>● Cervical Vertebrae - typical &amp; atypical</li> </ul> <p>Histology:</p> <ul style="list-style-type: none"> <li>● Tongue</li> <li>● Cornea</li> <li>● Retina</li> <li>● Cerebrum</li> <li>● Cerebellum</li> </ul> <p>Spinal cord</p>
		<p><b>7.1.4 (ECE)</b></p>	<ul style="list-style-type: none"> <li>● Radiology Department - CT/MRI - Observe procedures</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>● ENT OPD - Ear examination with speculum</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>● Ophthalmology OPD – Fundoscopy</li> </ul>

	7.2	PHYSIOLOGY	CENTRAL NERVOUS SYSTEM, SPECIAL SENSES & INTEGRATIVE PHYSIOLOGY
		7.2.1 (Theory)	<ul style="list-style-type: none"> <li>• Organization of nervous system</li> <li>• Synapse &amp; neurotransmitters</li> <li>• Sensory receptors</li> <li>• Sensory modalities, Sensory cortex</li> <li>• Ascending tracts</li> <li>• Pain: Receptor, Types, Pathway</li> <li>• Referred pain, Pain analgesia system</li> <li>• Thalamus</li> <li>• Organization of motor system, Muscle spindle, Golgi tendon organ</li> <li>• Reflexes</li> <li>• Descending tracts: Pyramidal tract</li> <li>• Extrapyramidal tracts, spinal lesions</li> <li>• Basal ganglia: Nuclei, Connections, Functions &amp; Disorders</li> <li>• Cerebellum: Physiologic anatomy, Internal circuits, Connections, Functions, Disorders &amp; Cerebellar function tests</li> <li>• Vestibular Apparatus</li> <li>• Muscle tone: Regulation, Applied aspects</li> <li>• Regulation of posture &amp; movement</li> <li>• Hypothalamus: Connections, Functions &amp; applied aspects</li> <li>• Limbic system</li> <li>• Reticular formation, Sleep &amp; EEG</li> <li>• Learning &amp; Memory</li> <li>• Language &amp; Speech</li> <li>• Association cortices, Cortical plasticity</li> <li>• Structure of eye, Principles of image formation, Errors of refraction, Field of vision, Visual pathway, Visual reflexes</li> <li>• Visual acuity, Colour vision</li> <li>• Structure of ear, Auditory pathway, Properties of sound, Mechanism of hearing, Pitch discrimination, Intensity discrimination, Sound localization, Applied aspects</li> <li>• Smell &amp; Taste</li> </ul>
		7.2.2 ( Theory SDL)	<ul style="list-style-type: none"> <li>• CSF</li> <li>• The photoreceptor mechanism</li> <li>• Movements of eye</li> </ul>
		7.2.3 ( Practical)	<ul style="list-style-type: none"> <li>• Examination of motor system</li> <li>• Reflexes</li> <li>• Examination of sensory system</li> </ul>
		7.2.4 (ECE)	<ul style="list-style-type: none"> <li>• Visit to medicine department for observing neurological cases</li> <li>• Visit to Ophthalmology department for observing optometry &amp; fundus examination</li> <li>• Visit to ENT department for observing otoscopy &amp; audiometry</li> </ul>

	<b>7.3</b>	<b>BIOCHEMISTRY</b>	<b>CENTRAL NERVOUS SYSTEM, HEAD &amp; NECK &amp; SPECIAL SENSES</b>
		<b>7.3.1 (Theory)</b>	<ul style="list-style-type: none"> <li>• Vitamin A, B1, Pantothenic Acid</li> <li>• Aromatic Amino acids</li> <li>• Glycine, GABA, Glutamic acid, Histidine</li> <li>•</li> </ul>
		<b>7.3.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Interpretation of CSF analysis and other body fluids</li> </ul>
		<b>7.3.3 ( Practical)</b>	<ul style="list-style-type: none"> <li>• No practical</li> </ul>
		<b>7.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Inborn errors of amino acid metabolism- case reports, lab findings</li> <li>• Peripheral neuropathy</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	➤ Work Ethics
<b>8</b>	<b>RENAL SYSTEM</b>		
	<b>8.1</b>	<b>ANATOMY</b>	<b>RENAL SYSTEM</b>
		<b>8.1.1 (Theory)</b>	Gross anatomy: <ul style="list-style-type: none"> <li>• Kidney &amp; ureter</li> <li>• UrinaryBladder</li> </ul> Histology: <ul style="list-style-type: none"> <li>• Kidney, ureter, UrinaryBladder</li> </ul> Development: <ul style="list-style-type: none"> <li>• Kidney, ureter, UrinaryBladder</li> </ul>
		<b>8.1.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Urethra Male &amp; Female</li> </ul>
		<b>8.1.3 (Practical)</b>	Dissection: <ul style="list-style-type: none"> <li>• Kidney</li> <li>• Ureter</li> <li>• UrinaryBladder</li> </ul> Histology: <ul style="list-style-type: none"> <li>• Kidney</li> <li>• Ureter</li> <li>• UrinaryBladder</li> </ul> Demonstration: <ul style="list-style-type: none"> <li>• Embryology charts: Development of kidney, ureter &amp; urinaryBladder</li> </ul>
		<b>8.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Case reports &amp; X-rays of patients with renal disorders</li> <li>• Skills lab - Catheterization of male &amp; female urethra</li> </ul>

	8.2	PHYSIOLOGY	RENAL SYSTEM
		8.2.1 (Theory)	<ul style="list-style-type: none"> <li>• Functional anatomy, Nephron- Types, JG apparatus, Renin-angiotensin system</li> <li>• Renal circulation</li> <li>• GFR: Definition, factors affecting, regulation &amp; measurement</li> <li>• Tubular reabsorption &amp; Secretion</li> <li>• Mechanism of urine concentration &amp; dilution</li> <li>• Role of kidney in water &amp;electrolyte balance</li> <li>• Role of kidney in acid-base balance</li> <li>• Micturition</li> <li>• Renal function tests</li> <li>• Physiological basis of renal failure &amp; dialysis</li> <li>• Skin &amp; Temperature regulation</li> </ul>
		8.2.2 (Theory SDL)	<ul style="list-style-type: none"> <li>• Functional organization of the renal system, Non-excretory functions of Kidney</li> <li>• Principle of Diuresis and Diuretics</li> <li>•</li> </ul>
		8.2.3 (Practical)	Examination of cranial nerves 1-12
		8.2.4 (ECE)	Visit to dialysis unit
	8.3	BIOCHEMISTRY	RENAL SYSTEM
		8.2.1 (Theory)	<b>Excretory function:</b> <ul style="list-style-type: none"> <li>• Formation of ammonia, Detoxification of ammonia,</li> <li>• Urea cycle</li> </ul> <b>Regulatory function:</b> <ul style="list-style-type: none"> <li>• Water and electrolyte balance(Na,K,Cl),</li> <li>• Renal Regulation of Acid Base balance</li> </ul> <b>Renal function test:</b> <ul style="list-style-type: none"> <li>• Tests for glomerular and tubular functions</li> </ul>
		8.2.2 (Theory SDL)	<ul style="list-style-type: none"> <li>• Interpretation of RFT, Disorders of urea cycle(Hyperammonemia)</li> <li>• Lab diagnosis of renal failure, nephritic/ nephrotic syndrome,RTA</li> <li>• Interpretation of metabolic acidosis and metabolic alkalosis</li> </ul>
		8.2.3 (Practical)	<ul style="list-style-type: none"> <li>• Normal Urine analysis</li> <li>• Abnormal Urine analysis</li> <li>• Demonstration of Dipsticks</li> <li>• Estimation of Urea , Creatinine &amp; Uric acid</li> <li>• Demonstration of Electrolyte analysis ( ISE method)</li> <li>• Demonstration of ABG analysis</li> </ul>
		8.2.4 (ECE)	<ul style="list-style-type: none"> <li>• Patient presenting with Edema</li> <li>• Diabetic ketoacidosis</li> <li>• Urinary Tract Infection</li> <li>• Acute/ Chronic Renal failure</li> </ul>

		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>● Attributes of Professionalism</li> </ul>
<b>9.</b>	<b>GASTROINTESTINAL SYSTEM, HEPATOBILIARY &amp; PANCREATIC SYSTEM &amp; NUTRITION</b>		
	<b>9.1</b>	<b>ANATOMY</b>	<b>GASTROINTESTINAL SYSTEM, HEPATOBILIARY &amp; PANCREATIC SYSTEM</b>
		<b>9.1.1 (Theory)</b>	<p>Gross Anatomy:</p> <ul style="list-style-type: none"> <li>● Anterolateral abdominal wall</li> <li>● Inguinal Canal</li> <li>● Peritoneum &amp; peritoneal cavity</li> <li>● Esophagus</li> <li>● Stomach</li> <li>● Duodenum</li> <li>● Pancreas</li> <li>● Liver</li> <li>● Extrahepatic Biliary Apparatus</li> <li>● Portal vein &amp; Portosystemic Anastomosis</li> <li>● Vermiform Appendix</li> <li>● Rectum</li> <li>● Anal Canal</li> <li>● Superficial &amp; deep perineal pouches</li> <li>● Ischio-anal fossa</li> </ul> <p>Systemic Histology:</p> <ul style="list-style-type: none"> <li>● Oesophagus</li> <li>● Stomach</li> <li>● Small intestine - duodenum, jejunum, ileum</li> <li>● Large intestine</li> <li>● Gall bladder</li> <li>● Liver</li> <li>● Pancreas</li> </ul> <p>Embryology:</p> <ul style="list-style-type: none"> <li>● Development of GIT - foregut, midgut &amp; hindgut derivatives</li> </ul>
		<b>9.1.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Cholecystitis</li> <li>● Appendicitis</li> <li>● Subphrenic spaces</li> <li>● Ascitis</li> </ul>
		<b>9.1.3 (Practical)</b>	<p>Dissection:</p> <ul style="list-style-type: none"> <li>● Anterior Abdominal Wall</li> <li>● Inguinal Canal</li> <li>● Peritoneal folds and recesses</li> <li>● Stomach</li> <li>● Duodenum</li> <li>● Coeliac Trunk</li> <li>● Jejunum, Ileum</li> <li>● Superior Mesenteric Artery</li> <li>● Liver</li> <li>● Extrahepatic Biliary Apparatus</li> <li>● Portal vein</li> </ul>

			<ul style="list-style-type: none"> <li>● Pancreas</li> <li>● Spleen</li> <li>● Caecum &amp; Appendix</li> <li>● Large intestine - ascending, transverse, descending &amp; sigmoid colon</li> <li>● Inferior Mesenteric Artery</li> <li>● Rectum</li> <li>● Anal Canal</li> </ul> <p>Osteology:</p> <ul style="list-style-type: none"> <li>● Anal Canal</li> <li>● Lumbar Vertebra</li> <li>● Sacrum</li> <li>● Bony pelvis</li> </ul> <p>Demonstration:</p> <ul style="list-style-type: none"> <li>● Surface anatomy of organs of GIT</li> <li>● Radiology - Plain and contrast Xrays</li> <li>● Embryology charts - GIT (foregut/rotation of midgut/hindgut)</li> </ul> <p>Systemic Histology:</p> <ul style="list-style-type: none"> <li>● Salivary glands: Serous &amp; mucous</li> <li>● Esophagus, Stomach</li> <li>● Duodenum, Jejunum, Ileum</li> <li>● Gallbladder</li> <li>● Large intestine</li> <li>● Liver</li> <li>● Pancreas</li> </ul>
		<b>9.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● Surgery - OT - observe abdominal surgery (inguinal hernia/appendectomy)</li> <li>● Department of Radiology - Ultrasonography - Abdomen</li> </ul>
	<b>9.2</b>	<b>PHYSIOLOGY</b>	<b>GASTROINTESTINAL SYSTEM, HEPATOBIILIARY &amp; PANCREATIC SYSTEM &amp; NUTRITION</b>
		<b>9.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● GIT: Organization, Innervation, Overview of GI motility</li> <li>● Salivary secretion</li> <li>● Mastication, Deglutition</li> <li>● Stomach- Structure, Functions, Secretion of gastric juice</li> <li>● Regulation of gastric secretion, Peptic ulcer</li> <li>● Motility of stomach, gastric emptying and its regulation.</li> <li>● Exocrine pancreas – functional anatomy, secretion, regulation</li> <li>● Liver &amp; Gall bladder</li> <li>● Small intestine: Secretion, Absorption, Motility</li> <li>● Large intestine: Secretion, Absorption, Motility</li> </ul>
		<b>9.2.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Pancreatic function tests and Liver function tests</li> <li>● Gastrointestinal Hormones</li> <li>● Digestion and absorption of carbohydrate / protein / fat in the GI tract</li> <li>● Gastrointestinal flora, GI lymphoid organs and Immune functions</li> </ul>

		<b>9.2.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Revision of clinical practicals</li> </ul>
		<b>9.2.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to medicine department</li> </ul>
	<b>9.3</b>	<b>BIOCHEMISTRY</b>	<b>GASTROINTESTINAL SYSTEM, HEPATOBILIARY &amp; PANCREATIC SYSTEM, NUTRITION, MOLECULAR BIOLOGY &amp; CANCER BIOLOGY</b>
		<b>9.3.1 (Theory)</b>	<p><b>Gastrointestinal system and Nutrition</b></p> <ul style="list-style-type: none"> <li>• Digestion and absorption of carbohydrates, lipids, proteins</li> <li>• Branched chain amino acids, polyamines</li> <li>• Micronutrients; Vitamins, Minerals</li> <li>• Energy metabolism &amp; Nutrition</li> </ul> <p><b>Hepatobiliary and Pancreatic function tests</b></p> <ul style="list-style-type: none"> <li>• Bile acid synthesis</li> <li>• Bilirubin metabolism</li> <li>• Types of jaundice and their biochemical alterations</li> <li>• Xenobiotics</li> </ul> <p><b>Molecular Biology &amp; Cancer Biology</b></p> <ul style="list-style-type: none"> <li>• Nucleotide chemistry and metabolism, Gout</li> <li>• Replication, transcription, translation and Inhibitors</li> <li>• Regulation of gene expression</li> <li>• Mutation, Genetic code</li> <li>• Molecular Diagnostic Techniques: PCR, Blotting</li> <li>• rDNA Technology</li> <li>• Tumor markers, oncogenes, tumor suppressor genes</li> <li>• Radio Active Isotopes</li> </ul>
		<b>9.3.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Inborn errors of amino acid metabolism</li> <li>• Diet therapy in disease conditions, PEM</li> <li>• Interpretation of LFT, Pancreatic function tests</li> <li>• HGP, Gene therapy</li> </ul>
		<b>9.3.3 (Practical)</b>	<ul style="list-style-type: none"> <li>• Estimation of Total Protein and Albumin</li> <li>• Demonstration of Electrophoresis and Chromatography</li> </ul>
		<b>9.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Jaundice – Types, Clinical presentation</li> <li>• Wilson's disease- case report &amp; videos</li> <li>• Protein Energy Malnutrition- clinical presentation, pictures</li> <li>• Gout – clinical presentation, videos</li> <li>• Vitamins deficiency disorders- clinical presentation, pictures</li> <li>• Diarrhoea – clinical findings</li> <li>• Normal pregnancy</li> </ul>
		<b>Integrated Teaching</b>	<ul style="list-style-type: none"> <li>• VIN MANTRA (Vinayaka Module for Academic Networking and Training) : Self directed and peer learning – Session II – Hepatitis</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	<ul style="list-style-type: none"> <li>• Competencies related to AETCOM in an Indian Medical Graduate</li> </ul>



<b>10.</b>	<b>REPRODUCTIVE SYSTEM &amp; MAMMARY GLAND</b>		
	<b>10.1</b>	<b>ANATOMY</b>	<b>REPRODUCTIVE SYSTEM &amp; MAMMARY GLAND</b>
		<b>10.1.1 (Theory)</b>	Gross anatomy: <ul style="list-style-type: none"> <li>● Testis</li> <li>● Prostate</li> <li>● Uterus, fallopian tube and ovaries</li> <li>● Mammary gland</li> </ul> Systemic Histology: <ul style="list-style-type: none"> <li>● Male reproductive system: Testis, ductus deferens, Epididymis. Prostate</li> <li>● Female reproductive system: Uterus, Fallopian tube, Ovary</li> </ul> Embryology: <ul style="list-style-type: none"> <li>● Development of male &amp; female reproductive systems</li> </ul>
		<b>10.1.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>● Male &amp; female external genitalia</li> <li>● Remnants of mesonephric and paramesonephric ducts</li> <li>● Hydrocoele</li> <li>● Undescended testis</li> </ul>
		<b>10.1.3 ( Practical)</b>	Dissection: <ul style="list-style-type: none"> <li>● Male reproductive organs (Male external genitalia, &amp; prostate, Testis, seminal vesicles)</li> <li>● Female reproductive organs (Uterus &amp; vagina, Supports of uterus and Ovaries)</li> <li>● Lateral pelvic wall</li> <li>● Sagittal Sections of pelvic cavity – Male and female</li> </ul> Demonstration: <ul style="list-style-type: none"> <li>● Radiology: Plain Xray Pelvis/HSG</li> </ul> Systemic Histology: <ul style="list-style-type: none"> <li>● Male reproductive system: Testis, ductus deferens epididymis</li> <li>● Female reproductive system: Uterus, fallopian tube &amp; ovary</li> </ul> Embryology charts: <ul style="list-style-type: none"> <li>● Development of male &amp; female reproductive systems</li> </ul>
		<b>10.1.4 (ECE)</b>	<ul style="list-style-type: none"> <li>● OBG - Labour room - Observe normal delivery</li> <li>● Skills lab - Per Rectal Examination</li> </ul>
	<b>10.2</b>	<b>PHYSIOLOGY</b>	<b>REPRODUCTIVE SYSTEM</b>
		<b>10.2.1 (Theory)</b>	<ul style="list-style-type: none"> <li>● Sex determination &amp; differentiation</li> <li>● Puberty: Stages of puberty in male and female and its control and applied aspects</li> <li>● Spermatogenesis</li> <li>● Testicular hormones</li> <li>● Oogenesis</li> <li>● Ovarian hormones</li> <li>● Ovarian cycle and menstrual cycle</li> <li>● Pregnancy- fertilization and implantation, pregnancy changes and parturition.</li> </ul>

			<ul style="list-style-type: none"> <li>• Placental hormones and pregnancy tests, feto-placental unit,</li> <li>• Contraceptive methods</li> </ul>
		<b>10.2.2 ( Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Male &amp; female reproductive organs</li> <li>• Physiology of breast development and lactation</li> </ul>
		<b>10.2.3( Practical)</b>	<ul style="list-style-type: none"> <li>• Revision of hematology practicals</li> </ul>
		<b>10.3.4 (ECE)</b>	<ul style="list-style-type: none"> <li>• Visit to OG department / Discussion of case studies</li> <li>• Visit to central lab for pregnancy tests</li> </ul>
	<b>10.3</b>	<b>BIOCHEMISTRY</b>	<b>REPRODUCTIVE SYSTEM</b>
		<b>10.3.1(Theory)</b>	<ul style="list-style-type: none"> <li>• Biosynthesis of GonadalHormones</li> <li>• Gonadal functiontest</li> <li>• Prenatal screeningtest</li> </ul>
		<b>10.3.2 (Theory SDL)</b>	<ul style="list-style-type: none"> <li>• Disorders of Gonadal hormonalfunction</li> </ul>
		<b>10.3.3(Practical)</b>	<ul style="list-style-type: none"> <li>• NoPractical</li> </ul>
		<b>10.3.4(ECE)</b>	<ul style="list-style-type: none"> <li>• Normal pregnancy</li> <li>• Dysfunctional Uterine Bleeding</li> <li>• Acne Vulgaris</li> </ul>
		<b>AETCOM / Professional Development Programme</b>	➤ Use of Reflective Writing and Narratives in Medical Education

**Department of Community Medicine**  
**I MBBS (2019 – 2020 Batch)**

**Total : 52 hours**

**Lectures – 20 Hours (20 x 1 hour)**

<b>S. No.</b>	<b>Topic</b>
1.	Man and medicine : Towards health for all (Medicine in antiquity, Dawn of scientific medicine)
2.	Man and medicine : Towards health for all (Modern medicine, Rise of public health)
3.	Man and medicine : Towards health for all (Health care revolution, Primary Health care)
4.	Concepts of health
5.	Dimensions of health
6.	Concepts of well –being (Standard of living, Quality of life)
7.	Determinants of health
8.	Indicators of health
9.	Concept of Disease & Concept of Causation
10.	Natural history of disease
11.	Concepts of prevention (Levels of prevention)
12.	Concepts of prevention (Modes of intervention)
13.	Nutrition & Health –Introduction
14.	Nutritional problems in India-LBW, Malnutrition
15.	Vitamin A deficiency
16.	Nutritional anemia
17.	Iodine deficiency disorders (IDD)
18.	Food Hygiene-Milk hygiene
19.	Food borne diseases –Food toxicants
20.	Food adulteration

**SMALL GROUP DISCUSSION -27 HOURS (9X3HRS)**

<b>S. No.</b>	<b>Topic</b>
1.	Immunity & Immunisation
2.	Vaccines
3.	National Immunisation Schedule
4.	Cold Chain
5.	Adverse Events Following Immunisation (AEFI)
6.	Demographic cycle & Demographic trends in India
7.	Fertility related statistics
8.	Family Planning & Contraceptive Methods
9.	Abortion & MTP Act

**SELF DIRECTED LEARNING – 5 HOURS**

<b>S. No.</b>	<b>Topic</b>	
1.	Epidemiological Study Designs - Case Control Study Cohort Study	3 hrs
2.	Screening for Diseases - Sensitivity & Specificity	2 hrs