UNDERGRADUATE (MBBS)

ACADEMIC RECORD/LOG BOOK

Physiology



The Tamil Nadu Dr. M.G.R. Medical University
Chennai

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Dr. M.G.R. Medical University
Chennai



Under Graduate (MBBS)
Academic Record/Log book
Department of Physiology

PREFACE

The goal of the Graduate Medical Education Regulation (GMER) is to sculpt every medical student into a responsible Indian Medical Graduate who can cater to the needs of the society. The thrust in the new regulations is to make medical education more learner-centric, patient-centric, gender-sensitive, outcome-oriented and environment appropriate.

Communication and interpersonal skills are imperative in providing quality medical care. Our curriculum achieves this by providing dedicated curriculum time in the form of a longitudinal program based on Attitude, Ethics and Communication (AETCOM) competencies. Foundation Course is to orient medical learners to MBBS programme, and provide them with requisite knowledge, communication, technical and language skills.

Electives allow students to get exposed to diverse environment, get a glimpse of future career, to revisit basic sciences of their own interest and indulge in research activities. Family adoption program aims to provide experimental learning opportunity to Indian Medical Graduates in community-based health care.

Skill laboratories have been incorporated into the curriculum for the learners to get an opportunity to learn clinical and communication skills while eliminating the fear of harming patients. The Learner-doctor method of clinical training (Clinical Clerkship) is to provide learners with experience in longitudinal patient care, by being part of the health care team providing hands-on care for patients.

This academic record / log book should be maintained as a document to record day-to-day academic activities, assessments, grading of assessments and its feedback. Periodic recording of all academic activities should be done by the student and has to be submitted to the faculty in-charge during feedback sessions. This document will incorporate in it all components that are being assessed for the final internal assessment and should be submitted to the concerned department and the examiners. Internal assessment marks will be given after evaluating this document. For subjects spanning across different phases this academic record has to be maintained for that particular subject and has to be evaluated at the end of posting in each phase.

CERTIFICATE

This is to certify that the candidate Mr./Ms…….. Reg No. ……., admitted in the year ……. in the ……. …….. (Medical College) has satisfactorily completed / has not completed all assignments / requirements mentioned in this logbook for first year MBBS course in the subject of Physiology during the period from …… to ……. She / He is eligible / not eligible to appear for the summative (University) assessment as on the date given below.

Signature of Faculty

Name and Designation

Countersigned by Head of the Department

Place:

Date:

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No.	Content	Page
1	Curriculum Vitae	
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CURRICULUM VITAE

Name of Student											
Date of commencement of phase 1											
Name of Parent/Guardian											
Date of Birth & Age											
Permanent Address											
Address for Postal Communication											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Student)											
Email ID (Parent/Guardian)											
Email ID (Student)											

Paste recent

passport size photo

Signature of Student

DISTRIBUTION OF SUBJECT WISE TEACHING HOURS

Subject	Large group teaching	SGT/ Practical/ Tutorials/ Seminars	SDL	Total
Foundation Course				80
Anatomy	180	430	10	620
Physiology	130	305	10	445
Biochemistry *	82	157	10	249
Early Clinical Exposure (ECE)**	-	27	-	27
Community Medicine	20	20	-	40
Family adoption Program (FAP)	-	24	-	24
(AETCOM)***	-	26	-	26
Sports and extra-curricular Activities	-	-	-	10
Total	**412**	**989**	**30**	**1521**

SGT: Small group teaching, SDL: Self-directed learning

*Including Molecular Biology

**Minimum ECE hours. These hours are to be divided equally by anatomy, physiology & biochemistry.

***AETCOM module is a longitudinal programme.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS THEORY AND PRACTICAL

THEORY								
IA-1	**PCT-1**	**IA-II**	**PCT-II**	**Prelims Theory**	**Continuous Class test**	**Seminar**	**SDL (Home assignment + Library assignment)**	**Total marks**
10	**10**	**10**	**10**	**20**	**20**	**10**	**10**	**100**

PRACTICAL							
PCT-1	**PCT -II**	**Prelims Practical**	**Certifiable skill- based competencies (Through OSPE/OSCE/Spots/ Exercise/Other)**	**AETCOM competencies**	**Record book**	**Research**	**Total marks**
20	**20**	**20**	**15**	**10**	**10**	**5**	**100**

**PCT – Part Completion test; **LMS – Learning Management System*

FORMATIVE ASSESSMENT - THEORY

Date	Assessment	Topic	Marks obtained
	IA - I		
	PCT - 1		
	IA - II		
	PCT - 2		
	Prelims	**Paper I**	
		Paper II	
		Total	

Signature of Facilitator

Formative Feedback Session - Theory assessment	Marks:
Topic:	Date:
Reflection by the Student	
Feed Back and Remedial Action suggested by the Facilitator/ Remedial assessment marks	
Signature of Student	
Signature of Facilitator after completion of remedial action	

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CONTINUOUS CLASS TEST (LMS)

No.	Topic	Date of completion
1	General Physiology	
2	Hematology	
3	Nerve and Muscle Physiology	
4	Cardiovascular Physiology	
5	Gastro-intestinal Physiology	
6	Renal Physiology	
7	Reproductive Physiology	
8	Respiratory Physiology	
9	Central Nervous System Physiology	
10	Endocrine Physiology	
11	Special senses	

Signature of Facilitator

No.	Competencies	
Topic 1: General Physiology		
1.1	Describe the structure and functions of a cell, intercellular communications and their applications in clinical care and research (Intercellular adhesions	
1.2	Discuss the principles of homeostasis and feedback mechanism	
1.3	Describe apoptosis (programmed cell death), explain its mechanism of action and physiological significance	
1.4	Describe and discuss transport mechanisms across cell membranes	
1.5	Describe the fluid compartments of the body, its ionic composition and measurements	
1.6	Describe the concept of pH and buffer systems	
1.7	Describe and discuss the molecular basis of RMP and AP in excitable tissue	
Topic 2: Hematology		
2.1	Describe the composition and functions of blood and its components	
2.2	Discuss origins, forms, variations and functions of plasma proteins and its clinical implications	
2.3	Describe the physiological structure, synthesis, functions and breakdown of hemoglobin. Discuss its variants and clinical significance	
2.4	Describe erythropoiesis & discuss its regulation in physiological and pathological situations	
2.5	Describe anemias, polycythemia & jaundice and discuss its physiological principles of management	
2.6	Describe the formation of WBC (Leucopoiesis), structure and function of various WBC types and their regulatory mechanisms	
2.7	Describe immunity in terms of its types, development, regulation and physiological significance	

2.8	Describe the formation, structure, functions of platelets and variations	
2.9	Describe hemostasis, coagulation pathways, mechanism of action of anticoagulants and briefly discuss pathophysiological aspects of bleeding & clotting disorders (e.g. hemophilia, purpura)	
2.10	Discuss types of blood groups, clinical importance of blood grouping, blood banking and transfusion	
Topic: Nerve & Muscle Physiology		
3.1	Describe the structure and functions of a neuron and neuroglia; Discuss nerve growth factors	
3.2	Describe the types, functions, properties of nerve fibers including strength duration curve, chronaxie and rheobase	
3.3	Classify nerve injury and discuss the mechanism of degeneration and regeneration in peripheral nerves	
3.4	Describe the microscopic structure of neuro-muscular junction and mechanism of neuromuscular transmission	
3.5	Discuss the applied aspects of neuromuscular junction: myasthenia gravis, Lambert Eaton syndrome and neuromuscular blocking agents	
3.6	Describe different types of muscle fibres, their structure and physiological basis of action potential	
3.7	Describe properties, action potential and molecular basis of muscle contraction in skeletal muscle	
3.8	Describe properties, action potential and molecular basis of muscle contraction in smooth muscle	
3.9	Describe the mode of muscle contraction (isometric and isotonic), energy source, muscle metabolism and gradation of muscular activity	
3.10	Enumerate and briefly discuss myopathies	
Topic 4: Gastro-intestinal Physiology		
4.1	Describe the functional anatomy of digestive system	
4.2	Enumerate various Gastrointestinal hormones (GI) hormones, discuss their functions and regulation	

4.3	Describe the composition, mechanism of secretion, functions, and regulation of saliva	
4.4	Describe the composition, mechanism of secretion, functions, and regulation of gastric juice. Discuss various gastric function tests	
4.5	Describe the composition, mechanism of secretion, functions, and regulation of pancreatic juice including various pancreatic exocrine function tests	
4.6	Describe the composition, mechanism of secretion, functions, and regulation of intestinal juices	
4.7	Describe the physiology of digestion and absorption of nutrients	
4.8	Describe GIT movements, its regulation and physiological significance including defecation reflex and the role of dietary fibres	
4.9	Describe the structure, functions and secretion of liver and gallbladder with elaboration of various liver function tests	
4.10	Describe the Gut-Brain Axis and its physiological significance	
4.11	Discuss (in brief) the applied physiology of GIT viz. Peptic ulcer, gastroesophageal reflux disease, vomiting, diarrhoea, constipation, Adynamic ileus, Hirschsprung's disease	
Topic 5: Cardiovascular Physiology		
5.1	Describe the functional anatomy of heart including chambers and coronary circulation	
5.2	Describe the properties of cardiac muscle including its morphology, electrical, mechanical and metabolic functions	
5.3	Describe generation and conduction of cardiac impulse along with the conduction pathway (including pacemaker potential).	
5.4	Discuss the physiological events occurring during the cardiac cycle, concurrent pressure volume changes, generation of heart sounds and murmur	
5.5	Describe the physiology of electrocardiogram (E.C.G), the cardiac axis and its applications	
5.6	Discuss physiological variations in ECG waveforms, abnormal waveforms and intervals, arrhythmias, heart blocks and myocardial Infarction	
5.7	Discuss haemodynamics of circulatory system	

5.8	Describe and discuss local and systemic cardiovascular regulatory mechanisms	
5.9	Describe heart rate, factors affecting heart rate, and its regulation	
5.10	Describe cardiac output, factors affecting cardiac output and its regulation.	
5.11	Describe blood pressure, factors affecting blood pressure and its regulation	
5.12	Describe & discuss regional circulation including microcirculation, lymphatic circulation, cerebral, capillary, skin, foetal, pulmonary and splanchnic circulation	
5.13	Describe the patho-physiology of shock, syncope heart failure with physiological basis of its management	
Topic 6: Respiratory Physiology		
6.1	Describe the functional anatomy of respiratory tract and non-respiratory functions of lungs	
6.2	Describe the mechanics of normal respiration, pressure changes during ventilation, lung volume and capacities (Static and Dynamic)	
6.3	Describe the alveolar surface tension, compliance, airway resistance, ventilation, V/P ratio, diffusion capacity of lungs	
6.4	Discuss the transport of respiratory gases viz Oxygen and Carbon dioxide across lungs and whole body	
6.5	Describe the chemoreceptors (peripheral and central) and neural centres of respiration including chemical and neural regulation of respiration	
6.6	Describe and discuss the pathophysiology of dyspnoea, hypoxia, cyanosis, asphyxia, drowning, periodic breathing and oxygen therapy	
6.7	Discuss various lung function tests and their clinical significance in obstructive and restrictive lung diseases	
6.8	Discuss the physiology of high altitude and acclimatization	
6.9	Discuss the physiology of deep-sea diving and decompression sickness	
Topic 7: Renal Physiology		

7.1	Describe the functional anatomy of kidney and non-excretory functions of kidney	
7.2	Describe the structure and functions of juxta glomerular apparatus and role of renin-angiotensin system	
7.3	Describe the mechanism of urine formation involving processes of filtration (Glomerular filtration), tubular reabsorption & secretion.	
7.4	Describe the mechanism of urine concentration and dilution (Counter current Multiplier & Exchanger)	
7.5	Describe the renal regulation of fluid and electrolytes & acid-base balance	
7.6	Describe the innervations of urinary bladder, physiology of micturition and its abnormalities	
7.7	Describe cystometry and discuss the normal cystometrogram	
7.8	Discuss various Renal Function Tests with its physiological significance and clinical implication of Renal clearance	
7.9	Discuss the role of artificial kidneys, dialysis and indications of renal transplant	
Topic 8: Endocrine Physiology		
8.1	Describe the functional anatomy of endocrine glands, mechanism of hormonal action (steroid and peptide) and hypothalamus pituitary axis {HPA}	
8.2	Describe the synthesis, secretion, transport, physiological actions, regulation and effect of altered (hypo and hyper) secretion of pituitary gland	
8.3	Describe the synthesis, secretion, transport, physiological actions, regulation and effect of altered (hypo and hyper) secretion of thyroid gland including thyroid function tests	
8.4	Describe the synthesis, secretion, transport, physiological actions, regulation and effect of altered (hypo and hyper) secretion of adrenal gland and its function tests	
8.5	Describe the synthesis, secretion, transport, physiological actions, regulation and effect of altered (hypo and hyper) secretion of parathyroid gland with emphasis of physiology of bone and calcium metabolism	
8.6	Describe the synthesis, secretion, transport, physiological actions, regulation and effect of altered (hypo and hyper) secretion of pancreatic gland including pancreatic function tests	
8.7	Describe the physiology of Thymus & Pineal Gland	

Topic 9: Reproductive Physiology		
9.1	Explain sex determination, sex differentiation and their abnormalities and discuss the effects of removal of gonads on physiological functions	
9.2	Describe and discuss puberty: onset, progression, stages; early and delayed puberty.	
9.3	Describe the functional anatomy of male reproductive system, functions of testis, spermatogenesis and discuss the functions and regulations of testosterone hormone	
9.4	Describe the functional anatomy of female reproductive system: functions of ovary and its hormones (estrogen and progesterone); hormonal regulation by hypothalamic pituitary gonadal (HPG axis)	
9.5	Discuss the menstrual cycle, uterine and ovarian changes, hormonal regulation and its implications in reproductive physiology	
9.6	Enumerate male and female contraceptive methods, rationale of its prescription, side effects and its advantages & disadvantages	
9.7	Discuss the physiology of pregnancy, parturition & lactation.	
9.8	Discuss the physiological basis of various pregnancy tests	
9.9	Discuss the hormonal changes and their effects during perimenopause and menopause	
9.10	Discuss the common causes of infertility in a couple and role of IVF in managing a case of infertility	
Topic 10: Central Nervous System Physiology		
10.1	Describe and discuss the functional organization of central nervous system (brain and spinal cord)	
10.2	Describe the functional anatomy of peripheral nervous system (including autonomic nervous system)	
10.3	Classify the neurotransmitters and discuss the chemical transmission in the nervous system.	
10.4	Discuss the classification, functions and properties of synapse	
10.5	Discuss the classification, functions and properties of reflex	

10.6	Discuss the classification, functions and properties of receptors	
10.7	Discuss somatic sensations, ascending tracts, (sensory tracts) and applied aspects of sensory system	
10.8	Discuss Physiology of pain including pain pathways and its modulation with special emphasis on gate control theory of pain	
10.9	Describe the course of descending tracts (pyramidal and extra pyramidal), its clinical implications including difference in Upper motor neuron (UMN)and lower motor neuron (LMN) lesions	
10.10	Discuss types and clinical features of spinal cord lesions (complete, incomplete transection and hemisection - Brown Sequard syndrome)	
10.11	Describe functional anatomy of cerebellum, its connections, functions and clinical abnormalities.	
10.12	Discuss functional anatomy of basal ganglia, its connections, functions and Clinical abnormalities.	
10.13	Discuss the mechanism of maintenance of tone, posture and control of body movements	
10.14	Discuss functional anatomy of thalamus, its connections, functions and clinical abnormalities.	
10.15	Discuss functional anatomy of hypothalamus and limbic system, its connections, functions and clinical abnormalities.	
10.16	Discuss functional anatomy of cerebral cortex, its connections, functions and Clinical abnormalities	
10.17	Discuss the structure and functions of reticular activating system, sleep physiology and EEG waveforms during sleep wake cycle	
10.18	Discuss the physiological basis of memory, learning and speech and clinical alterations in speech	
Topic 11: Special Senses		
11.1	Describe and discuss physiology of smell and its applied aspects	
11.2	Describe and discuss physiology of taste sensation and applied aspects	
11.3	Describe and discuss functional anatomy of ear and auditory pathways, vestibular apparatus and equilibrium	

11.4	Discuss physiology of hearing, pathophysiology of deafness and hearing tests	
11.5	Discuss functional anatomy of eye, visual pathway, light and pupillary reflex and clinical implication of lesions in visual pathway	
11.6	Discuss physiology of image formation, refractive errors and physiological principles of its management	
11.7	Discuss physiology of vision including colour vision and colour blindness	
Topic 12: Integrated Physiology		
12.1	Describe physiological mechanism of temperature regulation	
12.2	Discuss adaptation to altered temperature (heat and cold) and mechanism of fever, cold injuries and heat stroke	
12.3	Discuss cardio-respiratory and metabolic adjustments during exercise (isometric and isotonic), effects of physical training under different environmental conditions (heat and cold)	
12.4	Discuss physiological consequences of sedentary lifestyle; metabolic and endocrinal consequences of obesity & metabolic syndrome.	
12.5	Describe physiology of Infancy, Interpret growth charts and anthropometric assessment of infants	
12.6	Describe and discuss physiology of aging, role of free radicals and antioxidants	
12.7	Discuss the concept, criteria for diagnosis of Brain death and its implication	
12.9	Discuss the physiology of yoga and meditation	

SEMINAR

Note:

- This section includes academic mile stones attained through seminar.
- Seminar topics can be allotted to students and they can present the topic based on which assessment can be made.
- The completion of such activity shall be recorded in this section by the learner and signed by the facilitator.

Date	Topic

Signature of Facilitator

Seminar: **Date:**

Feedback given by the Facilitator

SELF DIRECTED LEARNING

Note:

- This section includes academic mile stones attained through self-directed learning. The learner shall be assigned a specific learning objective for each session. (Library assignments or Home assignments)
- The learner shall be given an assignment based on the core or non-core topics of the curriculum and any other such topics as deemed necessary.
- The structure for the assignment should include an introduction, main body of the assignment and a conclusion if it is an essay work. Illustrations, flow charts, tables and graphs should be part of the submission where ever necessary. The student shall also record a list of books/journals referred in Vancouver format.
- The completion of such activity shall be recorded in this section by the learner and signed by the facilitator.

Date	Topic

Signature of Facilitator

Assignment: 1 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

Assignment: 2 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

Assignment: 3 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

Assignment: 4 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

Assignment: 5 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

Assignment: 6 **Date:**

Bibliography:

Feedback given by the Facilitator

Signature of Facilitator:

FORMATIVE ASSESSMENT PRACTICAL

Date	Assessment	Topic	Marks obtained
	PCT– I		
	PCT – II		
	Prelims		

Signature of Facilitator

Formative Feedback Session - Practical assessment	Marks:
Topic:	Date:
Reflection by the Student	
Feed Back and Remedial Action suggested by the Facilitator/ Remedial assessment marks	
Signature of Student	
Signature of Facilitator after completion of remedial action	

Formative Feedback Session - Practical assessment	Marks:
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CERTIFIABLE SKILL BASED COMPETENCIES

(THROUGH OSPE/OSCE/SPOTS/EXERCISE/OTHER)

Note:

1. This section captures the skills and competencies obtained by the learner during the course work in the department.
2. The facilitator shall assess the learner for the specific certifiable competency and those certifiable competencies which the learner has acquired shall be entered in this section. A record of these is also maintained in the assessment record.

Competency and name of the activity	**PY 2.11 Estimate RBC, TLC and DLC**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 2.11 Estimate Hb, Blood groups, BT/CT and RBC indices**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 3.11 Perform Ergography and calculate the work done by a skeletal muscle**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 4.12 Obtain relevant history and conduct correct General and Clinical examination of the abdomen in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 5.16 Obtain relevant history and conduct General and Clinical examination of the cardiovascular system in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 5.14 Record pulse and blood pressure at rest in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 5.14 Record blood pressure during different grades of exercise and postures in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 5.15 Record and interpret normal ECG in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 6.12 Obtain relevant history and conduct correct General and Clinical examination of the respiratory system in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 6.10 Perform Spirometry and interpret the findings (Digital / Manual)**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 10.19 Obtain relevant history and conduct correct General and Clinical examination of the Higher functions and sensory system in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 10.19 Obtain relevant history and conduct correct General and Clinical examination of the motor system in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 10.19 Obtain relevant history and conduct correct General and Clinical examination of reflexes in a normal volunteer or simulated environment (Including Cerebellar function tests)**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity	**PY 10.20 Obtain relevant history and conduct correct General and Clinical examination of the cranial nerves in a normal volunteer or simulated environment**		
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity			
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

Competency and name of the activity			
Date			
Attempt at activity First or Only (F) Repeat (R) Remedial (Re)			
Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations Or Numerical Score			
Decision of faculty Completed (C) Repeat (R) Remedial (Re)			
Initial of faculty and date			
Feedback received Initial of learner			

ATTITUDE, ETHICS AND COMMUNICATION

The "Indian Medical Graduate" (IMG) shall possess requisite knowledge, skills, attitudes, values and responsiveness, so that he or she may function appropriately and effectively *as a doctor of first contact of the community* while being globally relevant. In order to fulfill this goal, the IMG must be able to function in the following ROLES appropriately and effectively:

1. **Clinician** who understands and provides preventive, promotive, curative, palliative and holistic care with compassion.
2. **Leader** and member of the health care team and system with capabilities to collect, analyze, synthesize and communicate health data appropriately.
3. **Communicator** with patients, families, colleagues and community.
4. **Lifelong learner** committed to continuous improvement of skills and knowledge.
5. **Professional,** who is committed to excellence, is ethical, responsive and accountable to patients, community and profession.
6. **Critical thinker** who demonstrates problem solving skills in professional practice.
7. **Researcher** who generates and interprets evidence to ensure effective patient care as well as contribute in the field of medical research and practice.

Note:

1. This section includes academic mile stones attained through AETCOM learning. The learner shall be assigned a specific learning objective for each session.
2. The learner shall be given an assignment based on the AETCOM topics of the curriculum.
3. They shall record a detailed synopsis of the skill learnt in this section. The student shall also record a reflection of the learning and learning process.
4. The completion of such activity shall be recorded in this section by the learner and signed by the facilitator.

Date	No.	Topic

Date	AETCOM Competency 1.2 What does it mean to be a patient?
Reflection / Narrative of the session	
Feedback by the Facilitator with signature	

Date	AETCOM Competency 1.2 What does it mean to be a patient?
Reflection / Narrative of the session	
Feedback by the Facilitator with signature	

Date	AETCOM Competency 1.2 What does it mean to be a patient?
Reflection / Narrative of the session	
Feedback by the Facilitator with signature	

Date	AETCOM Competency 1.3 The doctor-patient relationship
Reflection / Narrative of the session	
Feedback by the Facilitator with signature	

Date	AETCOM Competency 1.3 The doctor-patient relationship
Reflection / Narrative of the session	
Feedback by the Facilitator with signature	

Date	AETCOM Competency 1.3 The doctor-patient relationship
Reflection / Narrative of the session	
Feedback by the Facilitator	

HEMATOLOGY

Note:

1. This section captures the attainment of various competency mile-stones through hematology lab work.
2. The learner shall make observation entries as mandated in the concerned record / observation book.
3. The record/observation books shall be verified by the facilitator at the end of each session or module.
4. The completion of each such activity shall be recorded in this section by the learner and signed by the facilitator.
5. The end of each session shall be appended by an end of training formative assessment in the topic / session / module e.g. OSPE. Feedback for such outcomes may be suitably entered in the concerned documents.

Date	Test / Procedure / Experiment

Date	Test / Procedure / Experiment
Signature of Facilitator	

CLINICAL PHYSIOLOGY

Note:

1. This section includes academic mile stones attained through Clinical Physiology lab work.
2. The learner shall make observation entries as mandated in the record book.
3. The record note books shall be verified by the facilitator at the end of each session or module. The completion of each such activity shall be recorded in this section by the learner and signed by the facilitator.
4. The end of each session shall be appended by an end of training formative assessment in the topic / session / module e.g. OSPE, DOPS etc. Such sessional outcomes and feedback for such outcomes may be suitably entered in the concerned documents.

Date	Test / Procedure / Experiment

Date	Test / Procedure / Experiment
Signature of Facilitator	

ATTENDANCE

Month	Theory (%)	Practical (%)

Details	Percentage of attendance
Foundation Course (minimum 75%) (Common for all 3 departments)	
Theory	
Practical	
AETCOM	
Early Clinical Exposure	

INTEGRATED SESSION

1. This section includes academic mile stones attained through horizontal and vertical integrated sessions.
2. The learner shall attend all such integrated sessions, observe, interact and understand the topic.
3. The learner shall submit the end of session assessment (e.g. MCQ session of 15-20 MCQ questions)
4. The completion of such activity shall be recorded in this section by the learner and signed by the facilitator.

No.	Topic	Date of session
1		
2		
3		
4		
5		
6		

EARLY CLINICAL EXPOSURE

- The objectives of early clinical exposure are to enable the learner to

1. Recognize the relevance of basic sciences in diagnosis, patient care and treatment.
2. Provide a context that will enhance basic science learning.
3. Relate to experience of patients as a motivation to learn.
4. Recognize attitude, ethics and professionalism as integral to the doctor- patient relationship.
5. Understand the socio-cultural context of diseases through the study of humanities.

- The three elements of ECE are

1. Provision of clinical correlation to basic sciences learning.
2. Provision of authentic human contact in a social or clinical context that enhances learning in the early/pre-clinical years of undergraduate education.
3. Introduction to humanities in medicine.

- **Salient Principles:**

  The key principles underlying early clinical exposure are to provide a clinical context and ensure patient centricity. The clinical context can include case scenarios, videos, actual patient or simulated patient etc. The presence of actual patients in every session of ECE, though not essential, is preferred. Therefore, ECE is exposure to the relevant clinical context in earlier years. It must be noted that purpose of ECE is not to prepone the conventional clinical teaching but to provide better understanding of basic sciences through a clinical context.

  Note:

1. This section includes academic mile stones attained through early clinical exposure. The learner shall be assigned a specific learning objective for each session.
2. The learner shall be assigned to such ECE sessions in groups as deemed necessary by the individual institutions. The learner shall observe, interact, understand and perceive the activity. They shall record a detailed synopsis of the learning in this section. The student shall also record a detailed reflection of their experience of what was observed.
3. The completion of such activity shall be recorded in this section by the learner and signed by the facilitator.

ECE Session 1:	
Date	**Initials of Facilitator**
Objectives	
Synopsis of Learning / Reflection	

ECE Session 2:	
Date	**Initials of Facilitator**
Objectives	
Synopsis of Learning / Reflection	

ECE Session 3:	
Date	**Initials of Facilitator**
Objectives	
Synopsis of Learning / Reflection	

ECE Session 4:	
Date	**Initials of Facilitator**
Objectives	
Synopsis of Learning / Reflection	

PHOTO STORY

1. Students may document the important moments of this journey e.g. prizes won, competitions attended, department activities etc.,
2. These are based on the preferences of individual institutions.
3. The projects are voluntary activity and not included for internal assessment.

CO-CURRICULAR ACHIEVEMENTS

1. This section shall include the important co-curricular activities in which the student is involved during the academic year which shall be documented for the student and the department e.g. prizes won, competitions attended, etc.
2. These are based on the preferences of individual institutions.
3. The projects are voluntary activity and not included for internal assessment.