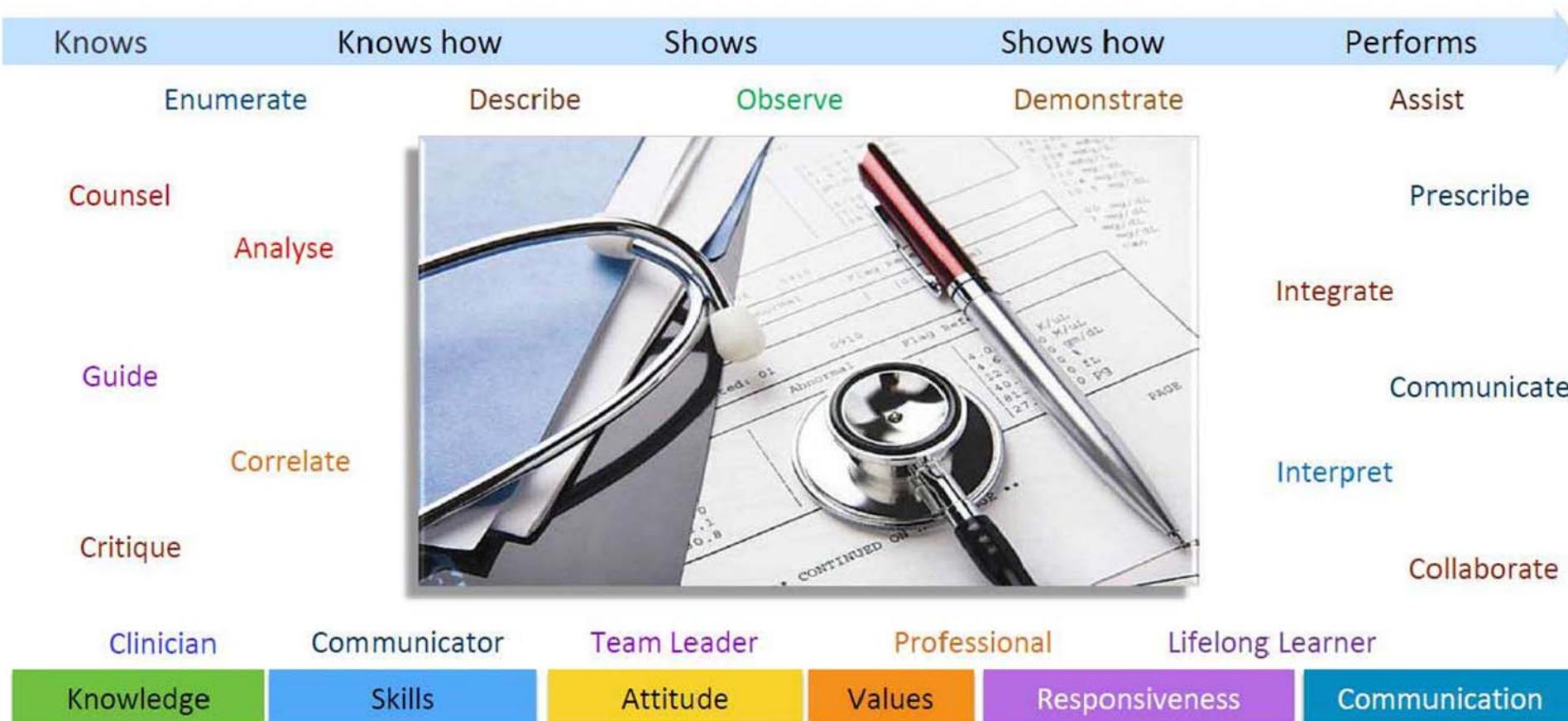




NATIONAL MEDICAL COMMISSION COMPETENCY BASED UNDERGRADUATE CURRICULUM FOR THE INDIAN MEDICAL GRADUATE



Volume II-2024

**COMPETENCY BASED UNDERGRADUATE CURRICULUM
FOR THE
INDIAN MEDICAL GRADUATE**

2024



**National Medical Commission
Pocket-14, Sector- 8, Dwarka
New Delhi 110 077**



राष्ट्रीय आयुर्विज्ञान आयोग National Medical Commission



FOREWORD

The National Medical Commission (NMC) was created on 24th September, 2020 by the Act of Parliament replacing the erstwhile Medical Council of India and Board of Governors. The foundation for making of an Indian Medical Graduate ('Doctor') depends on building a sound base of medical education. In the year 2019, a committed team appointed by erstwhile MCI revolutionized the age-old didactic teaching system in Indian medical colleges by bringing in Competency Based Medical Education (CBME). This unique approach has raised the level of medical education with respect to quality, versatility and horizontal- vertical alignment of all subjects. The mandate of NMC to see that the first line of health care leaders who reach out to the common masses empathizing with the problems of the rural populace are being met with. The two-pronged approach of increasing the quantity and improving the quality of medical education is being tackled with this approach.

Education has now become student-centric and patient-centric instead of pedagogic system. The first batch of students have now completed their training under CBME implemented in 2019. It was a demand from actively involved academia to revisit the curriculum and modify it so as to keep abreast at international level. Interim years of covid pandemic also were 'a good teaching academy' for all. Increasing influence of artificial intelligence on student community, matched with rising cost of medical education and competitiveness, instead of accommodative, helping and balanced approach, has led to increasing risk of losing social intelligence and humane approach amidst the emerging doctors. The risk of creating overqualified clerks looms large on our medical system.

A national team of experienced as well as emerging empathetic and talented teachers engaged as full-time faculty in various medical institutions were invited by the Undergraduate Education Board (UGMEB) of the NMC to invest their extra energy and hours to assess the curricula, examinations, AETCOM, vertical and horizontal integration of various subjects and bring in modifications. Each subject had committee of five persons on an average, from different parts of the country. Totally 93 experts have given their valuable time and energy in framing this new curriculum and all three volumes, prepared by their predecessors in 2019. The hard work done by them was the base on which this edifice has further been refined.

We are sure that fraternity and students are going to have an educational journey that will be full of fun, knowledge and experience sharing. UGMEB of the NMC acknowledges each and every one involved in the process, named and unsung heroes who have been the part of this exercise of bringing the document to the readers.

**Dr. Aruna V. Vanikar, President,
Dr. Vijayendra Kumar, Member,
UGMEB, NMC**

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How to use the Manual

This Manual is intended for curriculum planners in an institution to design learning and assessment experiences for the MBBS student. Contents created by subject experts have been curated to provide guidance for the curriculum planners, leaders and teachers in medical schools. The manual must be used with reference to and in the context of the Regulations.

Section 1

Competencies for the Indian Medical Graduate

Section 1 - provides the Roles (global competencies) extracted from the Competency Based Medical Education (CBME) Guidelines, 2024. The global competencies identified as defining the roles of the Indian Medical Graduate are the broad competencies that the learner must aspire to achieve, teachers and curriculum planners must ensure that the learning experiences are aligned to this Manual.

Extract from the Competency Based Medical Education (CBME) Guidelines, 2024

2. Objectives of the Indian Graduate Medical Training Programme

The undergraduate medical education program is designed with a goal to create an "Indian Medical Graduate" (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that she or he may function appropriately and effectively as a physician of first contact of the community while being globally relevant. To achieve this, the following national and institutional goals for the learner of the Indian Medical Graduate training program are hereby advocated. The first contact physician needs to be skillful to perform duties of primary care physician and have requisite skills for promotive, preventative, rehabilitative, palliative care & referral services.

2.1 National Goals

At the end of undergraduate program, the Indian Medical Graduate should be able to:

- a. Recognize "health for all" as a national goal and health right of all citizens and by undergoing training for medical profession to fulfill his social obligations towards realization of this goal.
- b. Learn key aspects of National policies on health and devote himself to its practical implementation.
- c. Achieve competence in the practice of holistic medicine, encompassing promotive, preventive, curative and rehabilitative aspects of common diseases.
- d. Develop scientific temper, acquire educational experience for proficiency in profession and promote healthy living.
- e. Become an exemplary citizen by observance of medical ethics and fulfilling social and professional obligations, so as to respond to national aspirations.

2.2 Institutional Goals

In consonance with the national goals, each medical institution should evolve institutional goals to define the kind of trained manpower (or professionals) they intend to produce. The Indian Medical Graduates coming out of a medical institute should be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations.

- a. Be competent for working in the health care team from Phase I MBBS to Compulsory rotatory medical internship (CRMI) in a gradual manner with increasing complexity in an integrated multi-department involvement.
- b. Be competent to practice preventive, promotive, curative, palliative and rehabilitative medicine in respect to the commonly encountered health problems.
- c. Appreciate rationale for different therapeutic modalities; be familiar with the administration of the "essential medicines" and their common adverse effects.

- d. Appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities.
- e. Possess the attitude for continued self-learning and to seek further expertise or to pursue research in any chosen area of medicine, action research and documentation skills.
- f. Be familiar with the basic factors which are essential for the implementation of the National Health Programs including practical aspects of the following:
 - i. Family Welfare and Maternal and Child Health (MCH);
 - ii. Sanitation and water supply;
 - iii. Prevention and control of communicable and non-communicable diseases;
 - iv. Immunization;
 - v. Health Education and advocacy;
 - vi. Indian Public Health Standards (IPHS) at various level of service delivery;
 - vii. Bio-medical waste disposal;
 - viii. Organizational and or institutional arrangements.
- g. Acquire basic management skills in the area of human resources, materials and resource management related to health care delivery, general and hospital management, principal inventory skills and counselling.
- h. Be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures with maximum community participation.

- i. Be able to work as a leading partner in health care teams and acquire proficiency in communication skills.
- j. Be competent to work in a variety of health care settings.
- k. Have personal characteristics and attitudes required for professional life including personal integrity, sense of responsibility, dependability, and ability to relate to or
- l. show concern for other individuals.

All efforts must be made to equip the medical graduates to acquire certifiable skills as given in comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) Indian Medical Graduate, as given in the Graduate Medical Education Regulations.

2.3 Goals for the Learner

In order to fulfil these goals, the Indian Medical Graduate must be able to function in the following roles appropriately and effectively:-

- a. Clinician who understands and provides preventive, promotive, curative, palliative and holistic care with compassion.
- b. Leader and member of the health care team and system with capabilities to collect, analyse, synthesize and communicate health data appropriately.
- c. Communicate with patients, families, colleagues, community and community in a methodological and skillful way using various approaches in family visits, family adoption program, clinic-social cases, clinical cases and AETCOM training programs.
- d. Lifelong learner committed to continuous improvement of skills and knowledge.

- e. Professional, who is committed to excellence, is ethical, responsive and accountable to patients, community, profession, and society. Training of humanities and social sciences will be useful for this training.

3. Competency Based Training Programme of the Indian Medical Graduate

Competency based learning would include designing and implementing medical education curriculum that focuses on the desired and observable activity in real life situations. In order to effectively fulfill the roles, the Indian Medical Graduate would have obtained the following set of competencies at the time of graduation:

3.1 Clinician, who understands and provides preventive, promotive, curative, palliative and holistic care with compassion.

- 3.1.1 Demonstrate knowledge of normal human structure, function and development from a molecular, cellular, biological, clinical, behavioral and social perspective.
- 3.1.2 Demonstrate knowledge of abnormal human structure, function and development from a molecular, cellular, biological, clinical, behavioral and social perspective.
- 3.1.3 Demonstrate knowledge of medico-legal, societal, ethical and humanitarian principles that influence healthcare.
- 3.1.4 Demonstrate knowledge of national and regional health care policies including the National Health Mission that incorporates National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM), frameworks, economics and systems that influence health promotion, health care delivery, disease prevention, effectiveness, responsiveness, quality and patient safety.
- 3.1.5 Demonstrate ability to elicit and record from the patient, and other relevant sources including relatives and caregivers, a history that is complete and relevant to disease identification, disease prevention and health promotion.

- 3.1.6 Demonstrate ability to elicit and record from the patient, and other relevant sources, including relatives and caregivers, a history that is contextual to gender, age, vulnerability, social and economic status, patient preferences, beliefs and values.
- 3.1.7 Demonstrate ability to perform a physical examination that is complete and relevant to disease identification, disease prevention and health promotion.
- 3.1.8 Demonstrate ability to perform a physical examination that is contextual to gender, social and economic status, patient preferences and values.
- 3.1.9 Demonstrate effective clinical problem solving, judgment and ability to interpret and integrate available data in order to address patient problems, generate differential diagnoses and develop individualized management plans that include preventive, promotive and therapeutic goals.
- 3.1.10 Maintain accurate, clear and appropriate record of the patient in conformation with legal and administrative frameworks.
- 3.1.11 Demonstrate ability to choose the appropriate diagnostic tests and interpret these tests based on scientific validity, cost effectiveness and clinical context.
- 3.1.12 Demonstrate ability to prescribe and safely administer appropriate therapies including nutritional interventions, pharmacotherapy and interventions based on the principles of rational drug therapy, scientific validity, evidence and cost that conform to established national and regional health programmes and policies for the following:
 - a. Disease prevention,
 - b. Health promotion and cure,
 - c. Pain and distress alleviation, and
 - d. Rehabilitation and palliation.

3.1.13 Demonstrate ability to provide a continuum of care at the primary (including home care) and/or secondary level that addresses chronicity, mental and physical disability,

3.1.14 Demonstrate ability to appropriately identify and refer patients who may require specialized or advanced tertiary care.

3.1.15 Demonstrate familiarity with basic, clinical and translational research as it applies to the care of the patient.

3.2 Leader and member of the health care team and system

3.2.1 Work effectively and appropriately with colleagues in an inter-professional health care team respecting diversity of roles, responsibilities and competencies of other professionals.

3.2.2 Recognize and function effectively, responsibly and appropriately as a health care team leader in primary and secondary health care settings.

3.2.3 Educate and motivate other members of the team and work in a collaborative and collegial fashion that will help maximize the health care delivery potential of the team.

3.2.4 Access and utilize components of the health care system and health delivery in a manner that is appropriate, cost effective, fair and in compliance with the national health care priorities and policies, as well as be able to collect, analyse and utilize health data.

3.2.5 Participate appropriately and effectively in measures that will advance quality of health care and patient safety within the health care system.

3.2.6 Recognize and advocate health promotion, disease prevention and health care quality improvement through prevention and early recognition: in a) life style diseases and b) cancer, in collaboration with other members of the health care team.

3.3 Communicator with patients, families, colleagues and community

3.3.1 Demonstrate ability to communicate adequately, sensitively, effectively and respectfully with patients, families, colleagues and community in a

language that patients, families, colleagues and community understands and in a manner that will improve patient patients, families, colleagues and community satisfaction and health care outcomes.

- 3.3.2 Demonstrate ability to establish professional relationships with patients, families, colleagues and community that are positive, understanding, humane, ethical, empathetic, and trustworthy.
- 3.3.3 Demonstrate ability to communicate with patients, families, colleagues and community in a manner respectful of patient's preferences, values, prior experience, beliefs, confidentiality and privacy.
- 3.3.4 Demonstrate ability to communicate with patients, colleagues and families in a manner that encourages participation and shared decision- making and overcoming hesitancy towards health initiatives.

3.4 Lifelong learner committed to continuous improvement of skills and knowledge

- 3.4.1 Demonstrate ability to perform an objective self-assessment of knowledge and skills, continue learning, refine existing skills and acquire new skills.
- 3.4.2 Demonstrate ability to apply newly gained knowledge or skills to the care of the patient.
- 3.4.3 Demonstrate ability to introspect and utilize experiences, to enhance personal and professional growth and learning.
- 3.4.4 Demonstrate ability to search (including through electronic means), and critically re- evaluate the medical literature and apply the information in the care of the patient.
- 3.4.5 Be able to identify and select an appropriate career pathway that is professionally rewarding and personally fulfilling.

3.5 Professional who is committed to excellence, is ethical, responsive and accountable to patients, the profession and community.

- 3.5.1 Practice selflessness, integrity, responsibility, accountability and respect.

- 3.5.2 Respect and maintain professional boundaries between patients, colleagues and society.
- 3.5.3 Demonstrate ability to recognize and manage ethical and professional conflicts.
- 3.5.4 Abide by prescribed ethical and legal codes of conduct and practice.
- 3.5.5 Demonstrate commitment to the growth of the medical profession as a whole.

Section 2

Subject-wise competencies

Section 2 contains subject-wise competencies that must be achieved at the end of instruction in that subject. These are organised intables.

Competencies (Outcomes) in each subject are grouped according to topics number-wise. It is important to review the individual competencies inthe light of the topic outcomes as a whole. For each competency outlined - the learning domains (Knowledge, Skill, Attitude, Communication) are identified.The expected level of achievement in that subject is identified as – [knows (K), knows how (KH), shows how (SH), perform (P)]. As a rule, ‘perform’indicates independent performance without supervision and is required rarely in the pre-internship period. The competency is a core (Y - must achieve) or an non-core (N - desirable) outcome. Suggested learning and assessment methods (these are suggestions) and explanation of the terms used are given under thesection “definitions used in this document”. The suggested number of times a skill must be performed independently for certification in the learner’s logbook is also given.

The number of topics and competencies in each subject are given below:

Topics and competencies in Phase 1 & Phase 2 subjects (Volume I)

Sr. No.	Subjects	Number of topics	Number of competencies
1.	Anatomy	82	413
2.	Physiology	12	136
3.	Biochemistry	14	84
4.	Pharmacology	10	92
5.	Pathology	35	182
6.	Microbiology	11	74
7.	Forensic Medicine	14	158
	Total	178	1139

Topics and competencies in Medicine and Allied subjects (Volume II)

Sr. No.	Subjects	Number of topics	Number of competencies
1.	Community Medicine	20	136
2.	General Medicine	29	525
3.	Paediatrics	35	406
4.	Psychiatry	13	17
5.	Dermatology, Venereology & Leprosy	15	48
	Total	112	1132

Topics and competencies in Surgery and Allied subjects (Volume III)

Sr. No.	Subjects	Number of topics	Number of competencies
1.	General Surgery	30	133
2.	Ophthalmology	10	60
3.	Otorhinolaryngology	04	63
4.	Obstetrics & Gynaecology	38	141
5.	Orthopaedics	14	40
6.	Anesthesiology	11	52
7.	Radiodiagnosis & Toxicology	07	21
	Total	114	510

Deriving learning objectives from competencies

K	Knows	A knowledge attribute – Usually enumerates or describes
KH	Knows how	A higher level of knowledge – is able to discuss or analyse
S	Shows	A skill attribute: is able to identify or demonstrate the steps
SH	Shows how	A skill attribute: is able to interpret / demonstrate a complex procedure requiring thought, knowledge and behaviour
P	Performs (under supervision or independently)	Mastery for the level of competence - When done independently under supervision a pre-specified number of times - certification or capacity to perform independently results

Competency: An observable ability of a health professional, integrating multiple components such as knowledge, skills, values and attitudes.

PA42.3*	Identify the etiology of meningitis based on given CSF parameters	K/S	SH	Y
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LO 1	At the end of the session the phase II student must be able to enumerate the most common causes of meningitis correctly	► Audience - who will do the behavior
LO 2	At the end of the session the phase II student must be able to enumerate the components of CSF analysis correctly	► Behavior - What should the learner be able to do?
LO 3	At the end of the session the phase II student must be able to describe the CSF features for a given etiology of meningitis accurately	► Condition - Under what conditions should the learner be able to do it?
LO 4	At the end of the session the phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters	► Degree – How well must it be done

Learning Objective (LO): Statement of what a learner should be able to do at the end of a specific learning experience

*Numbers given are for illustrative purposes only and should not be compared with the same in curriculum documents

Deriving learning methods from competencies

Competency: An **observable** ability of a health professional, **integrating multiple components** such as knowledge, skills, values and attitudes.

PA34.3*	Identify the etiology of meningitis based on given CSF parameters	K, S	SH	Y
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Objective: Statement of what a learner should be able to do at the end of a specific learning experience

LO 1	At the end of the session the Phase II student must be able to enumerate the most common causes of meningitis correctly	Large or small group teaching
LO 2	At the end of the session the Phase II student must be able to enumerate the components of a CSF analysis correctly	
LO 3	At the end of the session the Phase II student must be able to describe the CSF features for a given etiologic of meningitis accurately	
LO 4	At the end of the session the Phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters	Small group teaching, practical session

*Numbers given are for illustrative purposes only and should not be compared with the same in curriculum documents

Deriving assessment methods from competencies

Competency: An **observable** ability of a health professional, **integrating multiple components** such as knowledge, skills, values and attitudes.

PA34.3*	Identify the etiology of meningitis based on given CSF parameters	K, S	SH	Y
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Objective: Statement of what a learner should be able to do at the end of a specific learning experience

LO 1	At the end of the session the Phase II student must be able to enumerate the most common causes of meningitis correctly	Written/SAQ: Enumerate 5 causes of meningitis based on their prevalence in India
LO 2	At the end of the session the Phase II student must be able to enumerate the components of a CSF analysis correctly	Short note or part of structured essay: Enumerate the components tested in a CSF analysis
LO 3	At the end of the session the Phase II student must be able to describe the CSF features for a given aetiology of meningitis accurately	Short note or part of structured essay: Describe the CSF findings that are characteristic of tuberculous meningitis
LO 4	At the end of the session the Phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters	Short note / part of the structured essay/ Direct observation/OSPE/ Viva voce Review the CSF findings in the following patient and identify (write or vocalize) the most likely etiology

* Numbers given are for illustrative purposes only and should not be compared with numbers in the curriculum document

Definitions used in the Manual

- Goal:** A projected state of affairs that a person or system plans to achieve.

In other words: Where do you want to go? Or What do you want to become?

- Competency:** The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and

Reflection in daily practice for the benefit of the individual and community being served.

In other words: What should you have? Or What should have changed?

- Objective:** Statement of what a learner should be able to do at the end of a specific learning experience. In other words:

What the Indian Medical Graduate should know, do, or behave.

Action Verbs used in this manual

Knowledge	Skill	Attitude/communicate
Enumerate	Identify	Counsel
List	Demonstrate	Inform
Describe	Perform under supervision	Demonstrate understanding of
Discuss	Perform independently	Communicate
Differentiate	Document	
Define	Present	
Classify	Record	
Choose	Elicit	
Interpret		
Report		

Note:

1. Specified essential competencies only will be required to be performed independently at the end of the final year MBBS.
2. The word 'perform' or 'do' is used ONLY if the task has to be done on patients or in laboratory practical in the first/ second phases.
3. Most tasks that require performance during undergraduate years will be performed under supervision.
4. If a certification to perform independently has been done, then the number of times the task has to be performed undersupervision will be indicated in the last column.

Explanation of terms used in this manual

LGT (LGT)	Any instructional large group method including interactive lecture
SGT (SGT)	Any instructional method involving small groups of students in an appropriate learning context
DOAP (Demonstration-Observation-Assistance-Performance)	A practical session that allows the student to observe a demonstration, assist the performer, perform in a simulated environment, perform under supervision or perform independently
Skill assessment/ Direct observation	A session that assesses the skill of the student including those in the practical laboratory, skills- lab,skills- station that uses mannequins /papercase/ simulated patients/ real patients as the context demands
DOPS (Directly observed procedural skills)	DOPS is a method of assessment for assessing competency of the students in which the examiner directly observes the student performing procedure
Core	A competency that is necessary in order to complete the requirements of the subject (traditional - must know)
Non-Core	A competency that is optional in order to complete the requirements of the subject (traditional- nice (good) to know/ desirable to know)
National Guidelines	Health programs as relevant to the competency that are part of the National Health Program

Domains of learning

K	Knowledge
S	Skill
A	Attitude
C	Communication

Levels of competency

K	Knows	A knowledge attribute-Usually enumerates or describes
KH	Knows how	A higher level of knowledge-is able to discuss or analyze
SH	Shows how	A skill attribute: is able to interpret/ demonstrate a complex procedure requiring thought, knowledge and behavior
P	Performs (under supervision or independently)	Mastery for the level of competence - When done independently under supervision a pre-specified number of times - certification or capacity to perform independently results

Note:

In the table of competency - the highest level of competency acquired is specified and implies that the lower levels have been acquired already. Therefore, when a student is able to SH - Show how- an informed consent is obtained - it is presumed that the preceding steps - the knowledge, the analytical skills, the skill of communicating have all been obtained.

It may also be noted that attainment of the highest level of competency may be obtained through steps spread over several subjects or phases and not necessarily in the subject or the phase in which the competency has been identified.

Volume II

Competency based Undergraduate Curriculum

in

Medicine & Allied subjects

COMMUNITY MEDICINE (CODE: CM)

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
COMMUNITY MEDICINE (Topics:20 Competencies: 136)							
Topic 1: Concept of Health and Disease Number of competencies:(10) Number of competencies that require certification :(NIL)							
CM1.1	Define and describe the concept of Public Health	K	KH	Y	LGT, SGT	Written/Viva-voce	
CM1.2	Define health; describe the concept of holistic health including concept of spiritual health and the relativity & determinants of health	K	KH	Y	LGT, SGT	Written/Viva-voce	
CM1.3	Describe the characteristics of agent, host and environmental factors in health and disease and the multifactorial etiology of disease	K	KH	Y	LGT, SGT	Written/Viva-voce	
CM1.4	Describe and discuss the natural history of disease	K	KH	Y	LGT, SGT	Written/Vova voce	
CM1.5	Describe the application of interventions at various levels of prevention	K	KH	Y	LGT, SGT	Written/Vova voce	
CM1.6	Describe and discuss the concepts, the principles of Health promotion and Education, IEC and Behavioral change communication (BCC)	K	KH	Y	LGT, SGT	Written/viva-voce	
CM1.7	Enumerate and describe health indicators	K	KH	Y	LGT, SGT	Written/Vova voce	
CM1.8	Describe the Demographic profile of India and discuss its Impact on health	K	KH	Y	LGT, SGT	Written/Vova voce	
CM1.9	Demonstrate the role of effective Communication skills in health in a simulated environment	S	SH	Y	DOAP, FAP Clinical posting	Skill assessment /OSCE	
CM1.10	Demonstrate the Important aspects of the doctor patient relationship in a simulated environment	S	SH	Y	DOAP, FAP Clinical posting	Skill assessment /OSCE	
Topic 2: Relationship of social and behavioural to health and disease Number of competencies:(5) Number of competencies that require certification:(2)							
CM2.1	Describe the steps and perform clinico socio-cultural and demographic assessment of the individual, family and community	S	SH	Y	LGT,SGT, DOAP FAP Clinical posting	Written/Vova voce/ Skill assessment	5

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM2.2	Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status	S	SH	Y	LGT, SGT, DOAP FAP Clinical posting	Written/Vova voce/ Skill assessment /OSCE	5
CM2.3	Describe and demonstrate in a simulated environment the assessment of barriers to good health and health seeking behavior	S	SH	Y	LGT, SGT, DOAP FAP Clinical posting	Written/Vova voce/ Skill assessment /OSCE	
CM2.4	Describe social psychology, community behaviour and community relationship and their impact on health and disease	K	KH	Y	LGT, SGT, FAP Clinical posting	Written/Vova voce	
CM2.5	Describe poverty and social security measures and its relationship to health and disease	K	KH	Y	LGT, SGT, FAP Clinical posting	Written/Vova voce	

Topic 3: Environmental Health Problems Number of competencies:(08) Number of competencies that require certification:(NIL)

CM3.1	Describe the health hazards of air, water, noise, radiation and pollution	K	KH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce	
CM3.2	Describe concepts of safe and wholesome water, sanitary sources of water, water purification processes, water quality standards, concepts of water conservation and rainwater harvesting	K	KH	Y	LGT, SGT, DOAP FAP Clinical posting	Written/Vova voce	
CM3.3	Describe the aetiology and basis of water borne diseases /jaundice /hepatitis /diarrhoeal diseases	K	KH	Y	LGT, SGT, DOAP FAP Clinical posting	Written/Vova voce	
CM3.4	Describe the concept of solid waste, human excreta and sewage disposal	K	KH	Y	LGT, SGT	Written/Vova voce	
CM3.5	Describe the standards of housing and the effect of housing on health	K	KH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce	
CM3.6	Describe the role of vectors in the causation of diseases. Also discuss National Vector Borne disease Control Program	K	KH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce	
CM3.7	Identify and describe the identifying features and life cycles of vectors of Public Health Importance and their control measures	S	SH	Y	LGT, SGT, DOAP FAP Clinical posting	Written/Vova voce/ Skill assessment /OSCE	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM3.8	Describe the mode of action, application cycle of commonly used insecticides and rodenticides	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
Topic 4: Principles of health promotion and education Number of competencies:(4) Number of competencies that require certification:(01)							
CM4.1	Describe various methods of health education with their advantages and limitations	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM4.2	Describe the methods of organizing health promotion and education and counselling activities at individual family and community settings	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM4.3	Demonstrate and describe the steps in evaluation of health promotion and education program	S	SH	Y	SGT, DOAPFAP Clinical posting	Written/Vova voce/ Skill assessment /OSCE	
CM 4.4	Conduct a health education session for community awareness in a simulated environment/FAP/clinical posting	S	SH	Y	SGT, DOAPFAP Clinical posting	Written/Vova voce/ Skill assessment /OSCE	1
Topic 5: Nutrition Number of competencies:(22) Number of competencies that require certification:(5)							
CM5.1	Describe the common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological Conditions	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM5.2	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method	S	SH	Y	DOAP, FAP Clinical posting	Skill assessment /OSCE	
CM5.3	Define and describe common nutrition related health disorders (including macro-PEM, Micro-iron, Zn, iodine, Vit.A), their control and management	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment	S	SH	Y	DOAP, FAP Clinical posting	Skill assessment /OSCE	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM5.5	Describe the methods of nutritional surveillance principles nutritional education and rehabilitation in the context of socio-cultural factors.	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM5.6	Enumerate and discuss the National Nutrition Policy, important national nutritional Programs including the Integrated Child Development Services Scheme (ICDS) etc	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM5.7	Describe food hygiene	K	KH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce FAP Clinical posting	
CM5.8	Describe and discuss the importance and methods of food fortification and effects of additives and adulteration	K	KH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce	
CM5.9	Perform nutritional assessment of individual, family and community using appropriate method and plan a diet for health promotion based on the assessment	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5
CM 5.10	Recommend a dietary plan for a person with DM/ HTN/ Obesity in a simulated environment/FAP/Clinical posting	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5
CM5.11	Plan a diet for an adult which meets the protein (macro nutrients) requirements as per latest RDA-NIN guidelines for vegetarian/ ovo-vegetarian/non-vegetarian	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5
CM5.12	Demonstrate different types of breastfeeding holds, latching, manual expression of breast milk using a baby model and breast model.	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5
CM 5.13	Counsel a mother about complementary feeding for different age groups of the child covering the 8 dietary diversity food groups, quantity, frequency, consistency of the food.	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5
CM 5.14	Demonstrate an awareness of their own personal health and nutrition	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.15	Demonstrate knowledge of the role of nutrition in health promotion and disease prevention	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.16	Have knowledge of breast feeding and complementary feeding Practices	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM 5.17	Ability to counsel mothers on breast feeding with focus on attachment to breast and correct position of the newborn	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.18	Ability to counsel mothers on complementary feeding using National guidelines while being sensitive of cultural and socioeconomic influences	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.19	Assess the nutritional content of processed foods learning to understand labels, and empower patients to make informed nutritional decisions.	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.20	Counsel for diet modification for a diabetic/ hypertensive/obese individual	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.21	Plan and conduct a health education session on nutrition in NCD clinic / in community	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 5.22	Counsel mother on breast feeding and complementary feeding	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Topic 6: Basic statistics and its applications **Number of competencies:(06)** **Number of competencies that require certification:(1)**

CM6.1	Formulate research question for a study	K	KH	Y	SGT, LGT, DOAP	Written/Vova voce/ Skill assessment	
CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data	S	SH	Y	SGT, LGT, DOAP	Written/Vova voce/ Skill assessment/OSCE	
CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs	S	SH	Y	SGT, LGT, DOAP	Written/Vova voce/ Skill assessment/OSCE	
CM6.4	Enumerate, discuss and demonstrate Common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion	S	SH	Y	SGT, LGT, DOAP	Written/Vova voce/ Skill assessment/OSCE	
CM 6.5	Able to understand use of statistical software for the data analysis	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM 6.6	Perform descriptive statistics of a given data-set and interpret	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	5

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
Topic 7: Epidemiology Number of competencies:(11) Number of competencies that require certification: (01)							
CM7.1	Define Epidemiology and describe and enumerate the principles, concepts and uses	K	KH	Y	SGT, LGT	Written/Vova voce	
CM7.2	Enumerate, describe and discuss the modes of transmission and measures for prevention and control of communicable and non-communicable diseases	K	KH	Y	SGT, LGT	Written/Vova voce	
CM7.3	Enumerate, describe and discuss the sources of epidemiological data	K	KH	Y	SGT, LGT	Written/Vova voce	
CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data	S	SH	Y	SGT,DOAP	Written/Skill assessment, OSCE	5
CM7.5	Enumerate, define, describe and discuss epidemiological study designs	K	KH	Y	SGT, LGT	Written/Vova voce	
CM7.6	Enumerate and evaluate the need of screening tests	S	SH	Y	SGT,DOAP	Written/Skill Assessment	
CM7.7	Describe and demonstrate the steps in the investigation of an epidemic of communicable disease and describe the principles of control measures	S	SH	Y	SGT,DOAP	Written/Skill assessment /OSCE	
CM7.8	Describe the principles of association, causation and biases in epidemiological studies	K	KH	Y	SGT, LGT	Written/Vova voce	
CM7.9	Describe and demonstrate the application of computers in epidemiology	S	KH	Y	SGT,DOAP	Written	
CM7.10	Able to demonstrate development of research proposal	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
CM7.11	Able to demonstrate the skills for critically appraise the research articles or research data	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
Topic 8: Epidemiology of communicable and non-communicable diseases Number of competencies:(07) Number of competencies that require certification:(NIL)							
CM8.1	Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for communicable diseases	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM8.2	Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for Non-Communicable diseases (diabetes, Hypertension, Stroke, obesity and cancer etc.)	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM8.3	Enumerate and describe disease specific National Health Programs including their prevention and treatment of a case	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM8.4	Describe the principles and enumerate the measures to control a disease epidemic	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM8.5	Describe and discuss the principles of planning, Implementing and evaluating control measures for disease at community level bearing in mind the public health importance of the disease	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM8.6	Educate and train health workers in disease surveillance, control & treatment and health education	S	SH	Y	DOAP FAP Clinical posting	Skill assessment /OSCE	
CM8.7	Describe the principles of management of information systems	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	

Topic 9: Demography and vital statistics Number of competencies:(07) Number of competencies that require certification:(NIL)

CM9.1	Define and describe the principles of Demography, Demographic cycle, Vital statistics	K	KH	Y	SGT, LGT	Written/Vova voce	
CM9.2	Define, calculate and interpret demographic indices including birth rate, death rate, fertility rates	S	SH	Y	LGT, SGT, DOAP	Skill assessment /OSCE	
CM9.3	Enumerate and describe the causes of declining sex-ratio and its social and health Implications	K	KH	Y	SGT, LGT	Written/Vova voce	
CM9.4	Enumerate and describe the causes and consequences of population explosion and population dynamics of India.	K	KH	Y	SGT, LGT	Written/Vova voce	
CM9.5	Describe the methods of population control	K	KH	Y	SGT, LGT	Written/Vova voce	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM9.6	Describe the National Population Policy	K	KH	Y	SGT, LGT	Written/Vova voce	
CM9.7	Enumerate the sources of vital statistics including census, SRS, NFHS, NSSO etc	K	KH	Y	SGT, LGT	Written/Vova voce	

Topic 10: Reproductive maternal and child health		Number of competencies:(10)	Number of competencies that require certification:(NIL)				
CM10.1	Describe the current status of Reproductive, maternal, newborn and Child Health	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.2	Enumerate and describe the methods of screening high-risk groups and common health problems	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.3	Describe local customs and practices during pregnancy, child birth, lactation and child feeding practices	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.4	Describe the reproductive, maternal, newborn & child health (RMCH); child survival and safe motherhood interventions	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.5	Describe Universal Immunization Program; Integrated Management of Neonatal and Childhood Illness (GMNCI) and other existing Programs.	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.6	Enumerate and describe various family planning methods, their advantages and shortcomings	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.7	Enumerate and describe the basis and principles of the Family Welfare Program including the organization, technical and operational aspects	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM10.8	Describe the physiology, clinical management and principles of adolescent health including ARSH	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce FAP Clinical posting	
CM10.9	Describe and discuss gender issues and women empowerment	K	KH	Y	SGT, LGT FAP Clinical posting	Written/Vova voce	
CM 10.10	Able to manage the health care services for reproductive and child care services under supervision	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Topic 11: Occupational Health		Number of competencies:(06)	Number of competencies that require recertification:(NIL)				
CM11.1	Enumerate and describe the presenting features of patients with occupational illness including agriculture	K	KH	Y	SGT, LGT	Written/Vova voce	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM11.2	Describe the role, benefits and functioning of the employees state insurance scheme	K	KH	Y	SGT, LGT	Written/Vova voce	
CM11.3	Enumerate and describe specific occupational health hazards, their risk factors and preventive measures	K	KH	Y	SGT, LGT	Written/Vova voce	
CM11.4	Describe the principles of ergonomics in health preservation	K	KH	Y	SGT, LGT	Written/Vova voce	
CM11.5	Describe occupational disorders of health professionals and their prevention & management	K	KH	Y	SGT, LGT	Written/Vova voce	
CM 11.6	Able to manage the occupational health services at factory or industry level in a simulated environment	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Topic 12: Geriatric services Number of competencies:(05) Number of competencies that require certification:(NIL)

CM12.1	Define and describe the concept of Geriatric services	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM12.2	Describe health problems of aged population	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM12.3	Describe the prevention of health problems of aged population	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM12.4	Describe National program for elderly	K	KH	Y	LGT,SGT	Written/Vova voce	
CM 12.5	Able to identify the health needs to elderly individuals at the earliest	S	SH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce/OSCE	

Topic 13: Disaster Management Number of competencies:(05) Number of competencies that require certification:(NIL)

CM13.1	Define and describe the concept of Disaster management	K	KH	Y	LGT,SGT	Written/Vova voce	
CM13.2	Describe disaster management cycle	K	KH	Y	LGT,SGT	Written/Vova voce	
CM13.3	Describe man-made disasters in terworld And in India	K	KH	Y	LGT,SGT	Written/Vova voce	
CM13.4	Describe the details ofthe National Disaster management Authority	K	KH	Y	LGT, SGT	Written/Vova voce	
CM 13.5	Able to understand the management of handing a disaster in a simulated environment	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
Topic 14: Hospitalwaste management Number of competencies:(04) Number of competencies that require certification:(NIL)							
CM14.1	Define and classify hospital waste	K	KH	Y	LGT,SGT, visit to hospital	Written/Vova voce	
CM14.2	Describe various methods of treatment of hospital waste	K	KH	Y	LGT,SGT,visit to hospital	Written/Vova voce	
CM14.3	Describe laws related to hospital waste management	K	KH	Y	LGT, SGT	Written/Vova voce	
CM 14.4	Able to segregate the various hospital waste	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
Topic 15: Mental Health		Number of competencies:(04)		Number of competencies that require certification: (NIL)			
CM15.1	Define and describe the concept of mental Health	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM15.2	Describe warning signals of mental health disorder	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM15.3	Describe National Mental Health program	K	KH	Y	LGT,SGT FAP Clinical posting	Written/Vova voce	
CM 15.4	Able to recognise the mental issues among individuals, families and communities at the earlier stages	S	SH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce/OSCE	
Topic 16: Health planning and management		Number of competencies:(05)		Number of competencies that require certification:(NIL)			
CM16.1	Define and describe the concept of Health planning	K	KH	Y	LGT,SGT	Written/Vova voce	
CM16.2	Describe planning cycle	K	KH	Y	LGT,SGT	Written/Vova voce	
CM16.3	Describe Health management techniques	K	KH	Y	LGT,SGT	Written/Vova voce	
CM16.4	Describe health planning in India and National policies related to health and health planning	K	KH	Y	LGT, SGT	Written/Vova voce	
CM 16.5	Demonstrate understanding of concepts of Health planning in India, various health care economics analysis	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	
Topic 17: Health care of the community		Number of competencies:(06)		Number of competencies that require certification: (NIL)			
CM17.1	Define and describe the concept of health care to community	K	KH	Y	LGT,SGT	Written/Vova voce	
CM17.2	Describe community diagnosis	K	KH	Y	LGT,SGT	Written/Vova voce	

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching learning methods	Suggested Assessment methods	Number required to certify P
CM17.3	Describe primary health care, its components and principles	K	KH	Y	LGT,SGT	Written/Vova voce	
CM17.4	Describe National policies related to health and health planning and millennium development goals	K	KH	Y	LGT,SGT	Written/Vova voce	
CM17.5	Describe healthcare delivery in India	K	KH	Y	LGT,SGT	Written/Vova voce	
CM17.6	Demonstrate understanding of health system functioning in India	S	SH	Y	LGT, SGT, FAP Clinical posting	Written/Vova voce/OSCE	

Topic 18: International Health		Number of competencies:(3)		Number of competencies that require certification (NIL)			
CM18.1	Define and describe the concept of International health	K	KH	Y	LGT,SGT	Written/Vova voce	
CM18.2	Describe roles of various international health agencies	K	KH	Y	LGT,SGT	Written/Vova voce	
CM18.3	Demonstrate understanding role of various international and national agencies in health & disease with prevention of emergence and re-emergence of diseases and prevention of pandemic and handling the Pandemic	S	SH	Y	LGT, SGT	Written/Vova voce/OSCE	

Topic 19: Essential Medicine		Number of competencies:(04)		Number of competencies that require certification:(NIL)			
CM19.1	Define and describe the concept of Essential Medicine List (EML)	K	KH	Y	LGT,SGT	Written/Vova voce	
CM19.2	Describe roles of essential medicine in primary health care	K	KH	Y	LGT,SGT	Written/Vova voce	
CM19.3	Describe counterfeit medicine and its prevention	K	KH	Y	LGT, SGT	Written/Vova voce	
CM19.4	Demonstrate understanding of mechanism of identifying and calculation of requirements of various medicines and essential medicine at primary health care	S	SH	Y	LGT, SGT FAP Clinical posting	Written/Vova voce/OSCE	

Topic 20: Recent advances in Community Medicine		Number of competencies:(04)		Number of competencies that require certification:(NIL)			
CM20.1	List Important public health events of last five years	K	KH	Y	LGT, SGT	Written/Vova voce	
CM20.2	Describe various issues during outbreaks and their prevention	K	KH	Y	LGT, SGT	Written/Vova voce	
CM20.3	Describe any event important to Health of the Community	K	KH	Y	LGT, SGT	Written/Vova voce	
CM20.4	Demonstrate awareness about laws pertaining to practice of community medicine	K	KH	Y	LGT, SGT	Written/Vova voce	

GENERAL MEDICINE (CODE: GM)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GENERAL MEDICINE (Topics=29,Competencies=525)							
Topic 1: Heart failure Number of competencies: (27) Number of competencies that require certification : (3)							
GM 1.1	Describe and discuss the epidemiology, genetic basis ,pathogenesis clinical evolution and course of common causes of heart disease including: rheumatic/ valvular, ischemic, hypertrophic inflammatory	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.2	Describe and discuss the aetiology, microbiology, pathogenesis Clinical evolution, criteria, recognition and management of rheumatic fever, and rheumatic valvular heart disease, penicillin prophylaxis and its complications including infective endocarditis	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.3	Define and Stage heart failure	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.4	Describe, discuss, and differentiate the processes involved in Right Vs Left heart failure, systolic vs diastolic failure	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.5	Describe and discuss the compensatory mechanisms involved in heart failure including cardiac remodelling and neurohormonal adaptations	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.6	Enumerate, describe and discuss the factors that exacerbate heart failure including ischemia, arrhythmias, anaemia, thyrotoxicosis, dietary factors drugs etc.	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.7	Describe and discuss the pathogenesis and development of common arrhythmias involved in heart failure particularly atrial fibrillation	K	KH	Y	LGT / SGT	Application based question/ Viva voice	
GM 1.8	Elicit document and present an appropriate history that will establish the diagnosis, cause and severity of heart failure including: presenting complaints, precipitating and exacerbating factors, risk factors exercise tolerance, changes in sleep patterns, features suggestive of infective endocarditis	S	SH	Y	Bedside clinic	Long case /Short case Skill assessment OSCE	
GM 1.9	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and Estimate its	S	SH	Y	Bed side clinic, DOAP	Long case /Short case	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation					Skill assessment OSCE	
GM 1.10	Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure	S	SH	Y	Bed side clinic, DOAP	Long case / Short case, Skill assessment, OSCE	
GM 1.11	Measure the blood pressure accurately, recognise and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade	S	SH	Y	Bed side clinic, DOAP	Long case /Short case, Skill assessment, OSCE	
GM 1.12	Demonstrate and measure jugular venous distension	S	SH	Y	Bed side clinic, DOAP	Long case /Short case, Skill assessment, OSCE	3
GM 1.13	Identify and describe the Timing, pitch quality conduction and significance of precordial murmurs ,their variations , use of dynamic auscultation	S	SH	Y	Bed side clinic, DOAP	Long case /Short case, Skill assessment, OSCE	3
GM 1.14	Generate a differential diagnosis based on the clinical presentation of various heart diseases and prioritise it based on the most likely diagnosis	S	SH	Y	Bed side clinic, DOAP	Long case /Short case, Skill assessment, OSCE	
GM 1.15	Order and interpret diagnostic testing based on the clinical diagnosis including 12 lead ECG, Chest radiograph, blood cultures	S	SH	Y	Bed side clinic, DOAP	Long case /Short case, Skill assessment, OSCE	
GM 1.16	Perform and interpret a 12 lead ECG	S	SH	Y	Bed side clinic DOAP	Skill assessment OSCE	
GM 1.17	Enumerate the indications for and describe the findings of heart failure with the following investigations including: 2D echocardiography, brain natriuretic peptide, exercise testing, nuclear medicine testing and coronary angiogram	K	KH	N	LGT, SGT, Bed side clinic	Application based question/ Viva voice	
GM 1.18	Discuss the severity of valvular heart disease based on the clinical and laboratory and Imaging features and describe the level of intervention required including surgery	K S	KH/ SH	Y	LGT, SGT, Bed side clinic	Application based question, Long case /short	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
						case, Skill assessment, OSCE Viva voce	
GM 1.19	Describe and discuss and identify the clinical features of acute and sub-acute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy	K S	KH/ SH	Y	LGT, SGT, Bed side clinic	Application based question, Long case /short case, Skill assessment, OSCE, Viva voce	
GM 1.20	Assist and demonstrate the proper technique in collecting specimen for blood culture	S	SH	Y	DOAP Skills lab	Skill assessment OSCE	
GM 1.21	Describe, prescribe and communicate non pharmacologic management of heart failure including sodium restriction, physical activity and limitations	K S/C	K SH	Y	LGT, SGT, Role play	Application based question, Skill assessment OSCE	
GM 1.22	Describe and discuss the pharmacology of drugs including indications, contraindications in the management of heart failure including diuretics, ACE inhibitors, Beta blockers, aldosterone antagonists and cardiac glycosides	K	KH		LGT, SGT	Application based question, /Viva voce	
GM 1.23	Enumerate the indications for valvuloplasty, valvotomy, coronary revascularization and cardiac transplantation	K	KH	Y	LGT, SGT, Bedside clinic	Application based question,/Viva	
GM 1.24	Develop document and present a management plan for patients with heart failure based on type of failure, underlying aetiology	S	SH	Y	SGT, Bedside clinic	Application based question, Long case /Short case, Skill assessment, OSCE	
GM 1.25	Enumerate the causes of adult presentations of congenital heart disease and describe the distinguishing features between cyanotic and acyanotic heart disease	K	KH	Y	SGT, Bedside clinic	Application based question Viva voce	
GM 1.26	Elicit document and present an appropriate history, demonstrate correctly general examination, relevant clinical findings and	S	SH		SGT, Bedside clinic	Long case /Short case	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	formulate document and present a management plan for an adult patient presenting with a common form of congenital heart disease					Skill assessment OSCE, Viva voce	
GM 1.27	Administer an intramuscular injection with an appropriate communication to the patient	S	SH	Y	Bedside clinic Skills lab	Skill assessment OSCE Log book	2
Topic 2: Acute Myocardial Infarction / IHD		Number of competencies: (24)			Number of competencies that require certification : (03)		
GM 2.1	Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis and ischemic heart disease	K	KH	Y	LGT / SGT	Application based question /Viva voce	
GM 2.2	Discuss the aetiology of risk factors both modifiable and non modifiable of atherosclerosis and IHD	K	KH	Y	LGT / SGT	Application based question /Viva voce	
GM 2.3	Discuss and describe the lipid cycle and the role of dyslipidemia in the pathogenesis of atherosclerosis	K	KH	Y	LGT / SGT	Application based question /Viva voce	
GM 2.4	Discuss and describe the pathogenesis natural history, evolution and complications of atherosclerosis and IHD	K	KH	Y	LGT / SGT	Application based question /Viva voce	
GM 2.5	Define the various acute coronary syndromes and describe their evolution, natural history and outcomes	K	KH	Y	LGT / SGT	Application based question /Viva voce	
GM 2.6	Elicit document and present an appropriate history that includes onset evolution, presentation risk factors, family history, comorbid conditions, complications, medication, history of atherosclerosis, IHD and coronary syndromes	S	SH	Y	Bedside clinic/DOAP	Skill assessment	
GM 2.7	Perform, demonstrate and document a physical examination including a vascular and cardiac examination that is appropriate for the clinical presentation	S	SH	Y	Bedside clinic/DOAP	Skill assessment	
GM 2.8	Generate document and present a differential diagnosis based on the clinical presentation and prioritise based on “cannot miss”, most likely diagnosis and severity	S	SH	y	SGT/Bedside clinic	Skill assessment	
GM 2.9	Distinguish and differentiate between stable and unstable angina and AMI based on the clinical presentation	S	SH	y	Bedside clinic/DOAP	Skill assessment	
GM 2.10	Order, perform and interpret an ECG	S	SH	y	Bedside clinic/DOAP	Skill assessment	3
GM 2.11	Order and interpret a Chest X-ray and markers of acute myocardial	S	SH		Bedside clinic/DOAP	Skill assessment	3

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	Infarction						
GM 2.12	Choose and interpret a lipid profile and identify the desirable lipid profile in the clinical context	S	SH		Bedside clinic/DOAP	Skill assessment	
GM 2.13	Discuss and enumerate the indications for and findings on echocardiogram, stress testing and coronary angiogram	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.14	Discuss and describe the indications for admission to a coronary care unit and supportive therapy for a patient with acute coronary Syndrome	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.15	Discuss and describe the medications used in patients with an acute coronary syndrome based on the clinical presentation	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.16	Discuss and describe the indications for acute thrombolysis, PTCA and CABG	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.17	Discuss and describe the indications and methods of cardiac Rehabilitation	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.18	Discuss and describe the indications, formulations, doses, side effects and monitoring for drugs used in the management of Dyslipidemia	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.19	Discuss and describe the pathogenesis, recognition and management of complications of acute coronary syndromes including arrhythmias, shock, LV dysfunction, papillary muscle rupture and pericarditis	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.20	Discuss and describe the assessment and relief of pain in acute coronary syndromes	K	KH	Y	LGT / SGT	Written/Viva voce	
GM 2.21	Observe and participate in a controlled environment of ACLS Program	S	SH	Y	DOAP	Skill assessment	
GM 2.22	Perform and demonstrate in a mannequin BLS	S	P	Y	DOAP	Skill assessment(WPBA)	3
GM 2.23	Describe and discuss the indications for nitrates, anti-platelet agents, gpIIb IIIa inhibitors, beta blockers, ACE inhibitors etc in the management of coronary syndromes	K	KH	Y	LGT / SGT	Written /Viva	
GM 2.24	Counsel and communicate to patients with empathy lifestyle	C/A	SH	Y	DOAP,Role play	Skill	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	changes in atherosclerosis / post coronary syndromes					assessment(WPBA)	
Topic 3: Pneumonia		Number of competencies: (22)		Number of competencies that require certification : (04)			
GM3.1	Define, discuss, describe and distinguish community acquired pneumonia nosocomial pneumonia and aspiration pneumonia.	K	KH	Y	LGT, SGT	Application Based Questions / Viva voce	
GM3.2	Discuss and describe the aetiologies of various kinds of pneumonia and their microbiology depending on the setting and Immune status of the host	K	KH	Y	LGT, SGT	Application Based Questions / Viva voce	
GM3.3	Discuss and describe the pathogenesis, presentation, natural history and complications of pneumonia	K	KH	Y	LGT, SGT	Application Based Questions / Viva voce	
GM3.4	Elicit document and present an appropriate history including the evolution, risk factors including Immune status and occupational Risk	S	SH	Y	Bedside clinic, DOAP	Long/short case/OSCE	
GM3.5	Perform, document and demonstrate a physical examination including general examination and appropriate examination of the lungs that establishes the diagnosis, complications and severity of Disease	S	SH	Y	Bedside clinic, DOAP	Long/short case/OSCE	3
GM3.6	Generate document and present a differential diagnosis based on the clinical features, and prioritize the diagnosis based on the Presentation	K	KH	Y	Bedside clinic, DOAP	Long/short case	
GM3.7	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum gram stain, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing and ABG	S	SH	Y	Bedside clinic, DOAP, Tutorial	Skill assessment OSCE/ viva Voce	
GM3.8	Demonstrate on a mannequin, correct technique of collection of blood sample for an arterial blood gas examination	S	SH	Y	DOAP	Skill assessment OSCE	
GM3.9	Interpret results of arterial blood gas examination report	K	KH	Y	Bedside clinic, SGT	Viva voce	2
GM3.10	Demonstrate on a mannequin, correct technique of pleural fluid Aspiration	S	SH	Y	DOAP	Skill assessment OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM3.11	Outline the correct tests that require to be performed and interpret results of pleural fluid aspiration report	K S	KH SH	Y	Bedside clinic, SGT	Skill assessment OSCE Viva voce	2
GM3.12	Demonstrate on a mannequin, the correct technique of collection of blood for culture	S	SH	Y	DOAP,	Skill assessment OSCE	
GM 3.13	Interpret results of blood culture report.	K	KH	Y	Bedside clinic, SGT	Viva voce	
GM3.14	Describe and enumerate the indications for further testing including HRCT, Viral cultures, PCR and specialized testing	K	KH	Y	Bedside clinic, Tutorial	Viva voce	
GM3.15	Select, describe and prescribe based on the most likely aetiology, an appropriate empirical antimicrobial based on the pharmacology and ant Microbial spectrum	S	SH	Y	Bedside clinic, Tutorial	OSCE Viva voce	2
GM3.16	Select, describe and prescribe based on culture and sensitivity appropriate empirical Antimicrobial based on the pharmacology and antimicrobial spectrum.	S	SH	Y	Bedside clinic, SGT	OSCE Viva voce	
GM3.17	Describe and enumerate the indications for hospitalization in patients with pneumonia	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM3.18	Describe and enumerate the indications for isolation and barrier nursing in patients with pneumonia	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 3.19	Describe and discuss the supportive therapy in patients with pneumonia including oxygen use and indications for ventilation	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 3.20	Communicate and counsel patient on family on the diagnosis and therapy of pneumonia	C/A	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE	
GM 3.21	Discuss, describe, enumerate the indications for pneumococcal and influenza vaccines	K	KH	Y	LGT / SGT	Application based questions/ Viva voce	
GM 3.22	Communicate and counsel patient for pneumococcal and influenza Vaccines	S/C	SH	Y	Bedside clinic / DOAP	OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
Topic 4: Fever and febrile syndromes		Number of competencies: (20)		Number of competencies that require certification : (01)			
GM4.1	Describe and discuss the febrile response and the influence of host Immune status, risk factors, special populations (elderly, Immunosuppressed, malignancy, neutropenia HIV and travel) and comorbidities on the febrile response	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 4.2	Describe and discuss the patho-physiology and differences between fever and hyperthermia.	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM 4.3	Enumerate various common causes of fever and hyperthermia in various regions in India.	K	K	Y	LGT, SGT	MCQs/ Written, Viva voce	
GM4.4	Describe and discuss the pathophysiology and manifestations of inflammatory causes of fever	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM4.5	Describe and discuss the pathophysiology and manifestations of malignant causes of fever including hematologic and lymph node Malignancies	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM4.6	Discuss the approach to the patient with Acute Febrile Illness.	K	KH	Y	LGT, SGT	Application based question, , Viva voce	
GM4.7	Discuss and describe the pathophysiology and manifestations of the sepsis syndrome	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM4.8	Describe and discuss the pathophysiology, clinical features and management of heat related illness (heat cramps, heat exhaustion and heat stroke).	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM4.9	Discuss and describe the pathophysiology, aetiology and clinical manifestations of fever of unknown origin (FUO) including in a normal host neutropenic host nosocomial host and a host with HIV Disease	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM4.10	Elicit document and present a medical history that helps delineate the aetiology of fever that includes the evolution and pattern of fever, associated symptoms, Immune status, comorbidities, risk factors, exposure through occupation, travel and environment and	S	SH	Y	Bedside clinic, DOAP	Long/short case/OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	medication use						
GM4.11	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)	S	SH	Y	Bedside clinic, DOAP	Long/short case or OSCE	2
GM4.12	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes	K	SH	Y	Bedside clinic, SGT	Long/short case	
GM4.13	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, peripheral smear, urinary analysis with sediment, Chest X ray and other Imaging, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine and culture, serology, FNAC, biopsy, bone marrow examination and QBC.	K	SH	Y	Bedside clinic, SGT, Tutorial	Skill assessment (OSCE/ viva Voce)	
GM4.14	Enumerate in a patient with prolonged fever, the indications for various tests and describe the findings in tests of inflammation and specific rheumatologic tests, serologic testing for pathogens including HIV, bone marrow aspiration and biopsy	K	KH	N	LGT, SGT	Viva voce	
GM4.15	Observe and assist in the performance of a bone marrow aspiration and biopsy in a simulated environment	S	SH	N	Skills lab-DOAP	Log book/documentatio n	
GM4.16	Enumerate the indications for use of Imaging in the diagnosis of febrile syndromes	K	K	N	LGT, SGT	MCQ/ Written, Viva voce	
GM4.17	Interpret a PPD (Mantoux) in a given patient	S	SH	Y	DOAP	Logbook Documentation/OSCE	
GM4.18	Develop and present an appropriate diagnostic plan for patient with prolonged fever based on the clinical presentation, most likely diagnosis in a prioritised and cost-effective manner	K	KH	Y	Bedside clinic SGT	Application based question/ Viva voce	
GM4.19	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis	S	SH	Y	SGT Tutorial	Skill assessment OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM4.20	Communicate to the patient and family the diagnosis and treatment in a case of prolonged fever	C	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE	
Topic 5: Liver disease		Number of competencies: (17)		Number of competencies that require certification : (02)			
GM 5.1	Describe and discuss the physiologic and biochemical basis of hyperbilirubinemia	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.2	Describe and discuss the etiology and pathophysiology of various types of liver diseases.	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.3	Describe and discuss the epidemiology, microbiology, Immunology and clinical evolution of infective (viral) hepatitis	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.4	Describe and discuss the pathophysiology and clinical evolution of alcoholic liver disease	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.5	Describe and discuss the pathophysiology, clinical evolution and complications of cirrhosis of liver and portal hypertension including ascites, spontaneous bacterial peritonitis, hepato-renal syndrome, hepatic encephalopathy, acute GI bleed and hepatocellular Carcinoma	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.6	Enumerate and describe the causes and pathophysiology of drug induced liver injury	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.7	Describe and discuss the pathophysiology, clinical evolution and complications Cholelithiasis and cholecystitis	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.8	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination history and family history in patients with liver disease	S	SH	Y	Bedside clinic, DOAP session	(Long/short case/OSCE) Documentation in Journal	
GM 5.9	Perform a systematic examination that establishes the diagnosis	S	SH	Y	Bedside clinic, DOAP	(Long/short case or	2

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	and severity that includes nutritional status, mental status, jaundice, abdominal distension ascites, features of porto-systemic hypertension and hepatic encephalopathy				session	OSCE) Documentation in Journal	
GM 5.10	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific aetiology for the presenting symptom in patient with liver disease	K S	KH SH	Y	Bedside clinic, SGT	(Long/short case) Documentation in Journal	
GM 5.11	Choose and interpret appropriate diagnostic tests including: CBC, bilirubin, liver function tests, Hepatitis serology and ascitic fluid examination in patient with liver diseases	S	SH	Y	Bedside clinic, SGT Tutorial	(OSCE/ viva Voce)	
GM 5.12	Enumerate the indications for ultrasound and other Imaging studies including MRCP and ERCP and describe the findings in liver disease	K	KH	Y	Bedside clinic, SGT Tutorial	Application based question / Viva voce	
GM 5.13	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology	K	KH	Y	LGT/ Bedside clinic/ SGT Tutorial	Application based question / Viva voce	
GM 5.14	Assist in the performance and interpret the findings of an ascitic fluid analysis	S	SH	Y	Bedside, DOAP, Skills Lab	Documentation in Logbook / Viva voce,OSCE	2
GM 5.15	Describe and discuss the management of hepatitis, cirrhosis, portal hypertension, ascites spontaneous, bacterial peritonitis, acute GI Bleed , hepatic encephalopathy and hepatocellular carcinoma	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 5.16	Enumerate the indications, precautions and counsel patients on vaccination for hepatitis	K /C	KH SH	Y	LGT, SGT Bedside clinic Role play	Application based questions / Viva voce/ OSCE	
GM 5.17	Enumerate the indications for hepatic transplantation	K	K	Y	LGT, SGT	Application based questions / Viva voce	
Topic 6: HIV		Number of competencies: (22)			Number of competencies that require certification : (01)		
GM6.1	Describe and discuss the symptoms and signs of acute HIV sero-conversion	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.2	Define and classify HIV AIDS based on the CDC criteria	K	K	Y	LGT, SGT	MCQ/Written	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
						Viva voce	
GM6.3	Describe and discuss the relationship between CD4 count and the risk of opportunistic infections	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.4	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related opportunistic infections	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.5	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related malignancies	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.6	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related skin and oral lesions	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.7	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes risk factors for HIV, mode of infection, other sexually transmitted diseases, risks for opportunistic infections and nutritional status	S	SH	Y	Bedside clinic, DOAP	Short case/OSCE	
GM6.8	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology for the presenting symptom	S	SH	Y	Bedside clinic, DOAP, SGT	Short case/OSCE	
GM6.9	Choose and interpret appropriate diagnostic tests to diagnose and classify the severity of HIV-AIDS including specific tests of HIV, CDC	S	SH	Y	Bedside clinic, SGT Tutorial	Skill assessment (OSCE/ viva Voce)	
GM6.10	Choose and interpret appropriate diagnostic tests to diagnose opportunistic infections including CBC, sputum examination and cultures, blood cultures, stool analysis, CSF analysis, Chest radiographs.	S	KH	Y	Bedside clinic, SGT Tutorial	Skill assessment (OSCE/ viva Voce)	
GM6.11	Enumerate the indications and describe the findings for CT of the chest, brain and MRI Brain in a patient with opportunistic infections	K	KH	N	Bedside clinic SGT, Tutorial	Application based question, Viva voce	
GM6.12	Enumerate the indications for and interpret the results of: Pulse oximetry, ABG, Chest Radiograph in a patient with opportunistic infections	K	K, KH	Y	Bedside clinic, SGT Tutorial	Written/MCQ, Viva voce	
GM6.13	Describe and enumerate the indications and side effects of drugs for bacterial, viral and other types of diarrhea in a patient suffering from HIV/AIDS	K	K, KH	Y	LGT, SGT	Written/MCQ, Viva voce	
GM6.14	Discuss and describe the principles of HAART, the classes of	K	KH	Y	LGT,	Application based	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	antiretroviral used, adverse reactions and interactions in a patient suffering from HIV/AIDS				SGT	question, Viva voce	
GM 6.15	Discuss and describe the pathogenesis of IRIS and its management.	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.16	Discuss and describe the principles and regimens used in post exposure prophylaxis	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.17	Enumerate the indications and discuss prophylactic drugs used to prevent HIV related opportunistic infections	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM6.18	Counsel patients on prevention of HIV transmission.	C/S	SH	Y	Bedside clinic DOAP	Skills assessment - OSCE	3
GM6.19	Communicate diagnosis, treatment plan and subsequent follow up plan to patients with HIV/AIDS	C/S	SH	Y	Bedside clinic DOAP	Skills assessment - OSCE	
GM6.20	Communicate with patients with HIV/AIDS on the importance of medication adherence	C/S	SH	Y	Bedside clinic DOAP	Skills assessment - OSCE	
GM6.21	Demonstrate understanding of ethical and legal issues regarding patient confidentiality and disclosure in patients with HIV/AIDS	K/A	SH	Y	Bedside clinic DOAP, SGT	Skills assessment - OSCE Viva voce	
GM6.22	Demonstrate a non-judgmental attitude to patients with HIV/AIDS and to their lifestyles including gender orientation	A	SH	Y	Bedside clinic DOAP SGT	Skills assessment - OSCE	

Topic 7: Rheumatologic problems
Number of competencies: (22)
Number of competencies that require certification : (NIL)

GM7.1	Describe the pathophysiology and genetic basis of autoimmune disease	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.2	Classify cause of joint pain based on the pathophysiology	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.3	Develop a systematic clinical approach to joint pain based on The pathophysiology	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.4	Describe and discriminate acute, subacute and chronic causes Of joint pain	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.5	Discriminate, describe and discuss arthralgia from arthritis, articular from periarthritis complaints and Mechanical from inflammatory causes of joint pain	K	KH	Y	LGT, SGT	Written/ Vivavoce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM7.6	Describe the common signs and symptoms of Articular and periarticular diseases	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.7	Describe the systemic manifestations of rheumatologic disease	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM7.8	Elicit document and present a medical history that will differentiate the aetiologies of disease	S	SH	Y	Bedside clinic,DOAP	Skill assessment/OSCE	
GM7.9	Perform a systematic examination of all joints, muscle and skin That will establish the diagnosis and severity of disease	S	SH	Y	Bedside clinic,DOAP	Skill assessment	
GM7.10	Generate a differential diagnosis and prioritise based on Clinical features that suggest a specific aetiology	K/S	KH	Y	Bedside clinic, SGT	Skill assessment/Written	
GM7.11	Describe the appropriate diagnostic work up based on the presumed aetiology and Enumerate the indications for and interpret the results of : CBC, anti-CCP, RA, ANA, DNA and other tests Of autoimmunity	K	KH	Y	Bedside clinic, SGT	Skill assessment/Written /OSCE	
GM7.12	Enumerate the indications for arthrocentesis	K	K	Y	SGT,LGT	Written/ Vivavoce/log book	
GM7.13	Enumerate the indications and interpret plain radiographs of joints	K	SH	Y	Bedside clinic, SGT	Skill assessment/OSCE	
GM7.14	Communicate diagnosis, treatment plan and subsequent follow Up plan to patients	C	SH	Y	DOAP	Skill Assessment /OSCE	
GM7.15	Develop an appropriate treatment plan for patients with rheumatologic diseases	K	KH	Y	Bedside clinic, SGT	Application Based questions/Skill assessment/Written	
GM7.16	Select, prescribe and communicate appropriate medications for relief of joint pain and preventive therapy for crystalline arthropathies	K/C	SH	Y	DOAP	Application based questions/Skill assessment/Written	
GM7.17	Select, prescribe and communicate treatment option for systemic rheumatologic conditions	K/C	SH	Y	DOAP	Skill assessment/OSCE	
GM7.18	Describe the basis for biologic and disease modifying therapy in rheumatologic diseases	K	KH	Y	Bedside clinic, SGT	Skill assessment/Written /OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM7.19	Communicate and incorporate patient preferences in the choice Of therapy	C/A	SH	Y	DOAP	Skill assessment//OSCE	
GM7.20	Develop and communicate appropriate follow up and monitoring plans for patients with rheumatologic conditions	C	SH	Y	DOAP	Application based questions/Skill assessment//OSCE	
GM7.21	Demonstrate an understanding of the impact of Rheumatologic conditions on quality of life, well-being, work and family	A	SH	Y	DOAP	Skill assessment/OSCE	
GM7.22	Determine the need for specialist consultation	K	K	Y	SGT,LGT	Vivavoce	

Topic 8: Hypertension
Number of competencies: (19)
Number of competencies that require certification : (NIL)

GM 8.1	Describe and discuss the epidemiology, genetic basis aetiology and the prevalence of primary and secondary hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.2	Describe and discuss the pathophysiology of hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.3	Define and classify hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.4	Describe and discuss the differences between primary and secondary hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.5	Define, describe and discuss and recognise hypertensive urgency and emergency	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.6	Describe and discuss the clinical manifestations of the various aetiologies of secondary causes of hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.7	Describe, discuss and identify target organ damage due to Hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.8	Elicit document and present a medical history that includes: duration and levels, symptoms, comorbidities, lifestyle, risk factors, family history, psychosocial and environmental factors, dietary assessment, previous and concomitant therapy	S	SH	Y	Bedside clinic, DOAP	Skill assessment	
GM 8.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	S	SH	Y	Bedside clinic, DOAP	Skill assessment	

GM 8.11	Describe the appropriate diagnostic work up based on the presumed aetiology	K	KH	Y	SGT	Written / Viva	
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 8.12	Enumerate the indications for and interpret the results of : CBC, Urine routine, BUN, Cr, Electrolytes, Uric acid, ECG	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.13	Develop an appropriate treatment plan for essential hypertension	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.14	Recognise, prioritise and manage hypertensive emergencies	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 8.15	Develop and communicate to the patient lifestyle modification including weight reduction, moderation of alcohol intake, physical activity and sodium intake	C	SH	Y	DOAP	SELF ASSESSMENT	
GM 8.16	Perform and interpret a 12 lead ECG	S	P	Y	DOAP	Log Book/Skills Station	
GM 8.17	Counsel a patient and incorporate patient preferences in the management of HTN	A/C	SH	Y	DOAP	Skill assessment	
GM 8.18	Demonstrate understanding of the impact of Hypertension on quality of life, well being, work and family	A	SH	Y	Bed Side Clinic/DOAP	Faculty Observation	
GM 8.19	Determine the need for specialist consultation	K	KH	Y	LGT/SGT	Written / Viva	

Topic 9: Anaemia		Number of competencies: (21)			Number of competencies that require certification : (NIL)		
GM9.1	Define, describe and classify anemia based on red blood cell size and reticulocyte count	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM9.2	Describe and discuss the morphological characteristics, aetiology and prevalence of each of the causes of anaemia	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM9.3	Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history	S	SH	Y	Bed side clinic, DOAP	Skill assessment	
GM9.4	Perform a systematic examination that includes : general examination for pallor, oral examination, DOAP of Hyperdynamic circulation, lymph node and splenic examination	S	SH	Y	Bedside clinic	Skill assessment/OSCE	
GM9.5	Generate a differential diagnosis and prioritise based on Clinical features that suggest a specific aetiology	S	SH	Y	Bedside clinic, DOAP	Skill assessment/Written	

GM9.6	Describe the appropriate diagnostic work up based on The presumed aetiology	S	SH	Y	Bedside clinic, DOAP	Skill assessment/Written	
GM9.7	Describe and discuss the meaning and utility of components of the	K	KH	Y	LGT, SGT	Written/ Viva voce/	

	hemogram, various tests for iron deficiency, red cell indices, reticulocytecount, ironstudies, peripheral smear, B12 and folate levels					Skill assessment	
GM9.8	Describe the indications and interpret the results of a bone marrowaspirations and biopsy	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM9.8	Describe the indications and interpret the results of a bone marrowaspirations and biopsy	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM9.9	Describe, develop a diagnostic plan to determine the aetiology Ofanemia	K	KH	Y	LGT, SGT	Written/ Viva voce/ Skill assessment	
GM9.10	Prescribe replacement therapy with iron, B12, folate	S	SH	Y	Bedside clinic, DOAP	Skill assessment/Written	
GM9.11	Describe the national programs for anemia prevention	K	KH	Y	LGT, SGT	Written/Vivavoce	
GM9.12	Communicate the diagnosis and treatment appropriately to patients	C	SH	Y	DOAP	Skill assessment/OSCE	
GM9.13	Incorporatepatientpreferencesinthemanagementofanemia	C	SH	Y	DOAP	Skill assessment/OSCE	
GM9.14	Describe the indications for blood transfusion and the Appropriate use of blood components	K	KH	Y	LGT, SGT	Written/ Viva voce/ Skill assessment	
GM9.15	Describe the precautions required necessary when performing A blood transfusion	K	KH	Y	LGT, SGT	Written/ Viva voce/ Skill assessment	
GM9.16	Communicate and counsel patients with methods to prevent nutritional Anemia	C	SH	Y	DOAP	Skill assessment/OSCE	
GM9.17	Determine the need fors pecialist consultation	K	KH	Y	LGT,SGT	Written/OSCE	

Topic 10: Acute Kidney Injury and Chronic renal failure **Number of competencies: (24)** **Number of competencies that require certification : (01)**

GM10.1	Define, describe, classify, differentiate between the pathophysiologic causes of acute and chronic renal failure	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.2	Describe the pathophysiology and causes of pre renal ARF, Renal and post-renal ARF	K	KH	Y	LGT, SGT	Written/ Vivavoce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM10.3	Describe the evolution, natural history and treatment of ARF	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.4	Describe and discuss the aetiology and staging of CKD	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.5	Describe and discuss the pathophysiology and clinical findings Of uraemia	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.6	Classify, describe and discuss the significance of proteinuria in CKD	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.7	Describe and discuss the pathophysiology of anemia and hyperparathyroidism in CKD	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.8	Describe and discuss the association between CKD glycemia And hypertension	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.9	Elicit document and present a medical history that will differentiate the aetiologies of disease, distinguish acute and chronic disease, identify predisposing conditions, nephrotoxic drugs and Systemic causes	S	SH	Y	Bedside clinic, DOAP	Skill assessment	
GM10.10	Perform a systematic examination that establishes the diagnosis and severity including determination of volume status, presence of edema and heart failure, features of uraemia and Associated systemic disease	S	SH	Y	Bedside clinic, DOAP	Skill assessment	
GM10.11	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	K	KH	Y	DOAP, SGT	Skill assessment/Written / Vivavoce	
GM10.12	Describe the appropriate diagnostic work up based on the presumed aetiology	K	SH	Y	DOAP, SGT	Skill assessment/Written / Vivavoce	
GM10.13	Enumerate the indications for and interpret the results of : renal function tests, calcium, phosphorus, PTH, urine electrolytes, osmolality, Anion gap, FENa (Fractional Excretion of Sodium), CrCl (Creatinine Clearance) and renal ultrasound	K	KH	Y	DOAP, SGT	Skill assessment/Written / Vivavoce	2
GM10.14	Identify the ECG findings in hyperkalemia	S	SH	Y	DOAP, SGT	Skill assessment/Written / Vivavoce	
GM10.15	Describe and discuss the indications to perform arterial blood	S	P	Y	DOAP	documentation in	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	gasanalysis: interpret the data					logbook	
GM10.16	Describe and discuss the indications for and insert a Peripheral intravenous catheter	S	P	Y	DOAP,Bedside clinic	documentation inlogbook	
GM10.17	Communicate diagnosis, treatment plan and subsequent follow up plan to patients	C	SH	Y	DOAP	Skill assessment/OSCE	
GM10.18	Counsel patients on a renal diet	K	SH	Y	DOAP	Skillassessment/OSC E	
GM10.19	Identify and describe the priorities in the management of ARFincluding diet, volume management, alteration in doses of drugs, monitoring and indicationsfor dialysis	K/C	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.20	Describe and discuss supportive therapy in CKD including diet, anti-hypertensives, glycemic therapy, dyslipidemia, anemia, hyperkalemia, hyperphosphatemia and Secondary hyperparathyroidism	K	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.21	Describe and discuss the indications for renal dialysis	C/A	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.22	Describe and discuss the indications for renal replacement therapy	C	KH	Y	LGT,SGT	Written/ Vivavoce//OSCE	
GM10.23	Describe discuss and communicate the ethical and legal Issues involved in renal replacement therapy	C/A	KH	Y	LGT, SGT	Written/ Vivavoce	
GM10.24	Recognise the Impact of CKD on patient's quality of life, well- being, work and family and Incorporate patient preferences into the care of CKD	A/C	KH	Y	LGT, SGT,Bedside clinic	observationbyfaculty/OSCE	

Topic 11: Diabetes Mellitus
Number of competencies: (24)
Number of competencies that require certification : (01)

GM 11.1	Define and classify diabetes	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.2	Describe and discuss the epidemiology and pathogenesis and risk factors and clinical evolution of type 1 diabetes	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.3	Describe and discuss the epidemiology and pathogenesis and risk factors economic Impact and clinical evolution of type 2 diabetes	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.4	Describe and discuss the genetic background and the influence of the environment on diabetes	K	KH	Y	LGT, SGT	Written/Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 11.5	Describe and discuss the pathogenesis and temporal evolution of microvascular and macrovascular complications of diabetes						
GM 11.6	Describe and discuss the pathogenesis and precipitating factors, recognition and management of diabetic emergencies	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.7	Elicit document and present a medical history that will differentiate the aetiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.8	Perform a systematic examination that establishes the diagnosis and severity that includes skin, peripheral pulses, blood pressure measurement, fundus examination, detailed examination of the foot (pulses, nervous and deformities and injuries)	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.9	Describe and recognise the clinical features of patients who present with a diabetic emergency	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.11	Order and interpret laboratory tests to diagnose diabetes and its complications including: glucoses, glucose tolerance test, glycosylated hemoglobin, urinary micro albumin, ECG, electrolytes, ABG, ketones, renal function tests and lipid profile	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.12	Perform and interpret a capillary blood glucose test	K	KH	Y	LGT, SGT	Written/Viva voce	2
GM 11.13	Perform and interpret a urinary ketone estimation with a dipstick	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.14	Recognise the presentation of hypoglycaemia and outline the principles on its therapy	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.15	Recognise the presentation of diabetic emergencies and outline the principles of therapy	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.16	Discuss and describe the pharmacologic therapies for diabetes their indications, contraindications, adverse reactions and interactions	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.17	Outline a therapeutic approach to therapy of T2Diabetes based on presentation, severity and complications in a cost-effective manner	K	KH	Y	LGT, SGT	Written/Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 11.18	Describe and discuss the pharmacology, indications, adverse reactions and interactions of drugs used in the prevention and treatment of target organ damage and complications of Type II Diabetes including neuropathy, nephropathy, retinopathy, hypertension, dyslipidemia and cardiovascular disease	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.19	Demonstrate and counsel patients on the correct technique to administer insulin	K	KH	Y	LGT,SGT	Written/Viva voce	
GM11.20	Demonstrate to and counsel patients correct technique on the of self-monitoring of blood glucoses	K	KH	Y	LGT,SGT	Written/Viva voce	
GM11.21	Recognise the Importance of patient preference while selecting therapy for diabetes	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.22	Enumerate the causes of hypoglycaemia and describe the counter hormone response and the initial approach and treatment	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.23	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of diabetic ketoacidosis	K	KH	Y	LGT, SGT	Written/Viva voce	
GM 11.24	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of Hyperosmolar non ketotic state	K	KH	Y	LGT, SGT	Written/Viva voce	

Topic 12: Thyroid Dysfunction
Number of competencies: (14)
Number of competencies that require certification : (01)

GM 12.1	Describe the epidemiology, genetic basis and pathogenesis of hypothyroidism and hyperthyroidism including the influence of iodine deficiency and autoimmunity in the pathogenesis of thyroid disease	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 12.2	Describe and discuss the physiology of the hypothalamopituitary - thyroid axis, principles of thyroid function testing and alterations in physiologic function	K	K	Y	LGT,SGT	Written	
GM 12.3	Describe and discuss the principles of radio iodine uptake in the diagnosis of thyroid disorders	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 12.4	Elicit document and present an appropriate history that will establish the diagnosis cause of thyroid dysfunction and its severity	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 12.5	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and severity including systemic signs of thyrotoxicosis and hypothyroidism, palpation of the rhythm abnormalities neck palpation of the thyroid and lymph nodes and cardiovascular findings	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 12.6	Demonstrate the correct technique to palpate the thyroid	S	SH	Y	Bedside clinic,DOAP	Skill assessment	
GM 12.7	Generate a differential diagnosis based on the clinical presentation and prioritise it based on the most likely diagnosis	K	KH	Y	Bedside clinic,SGT	Written	
GM 12.8	Order and interpret diagnostic testing based on the clinical diagnosis including CBC, thyroid function tests and ECG and radio iodine uptake and scan	S	SH	Y	Bedside clinic,DOAP	Skill assessment	
GM 12.9	Identify atrial fibrillation, pericardial effusion and bradycardia on ECG	S	SH	Y	Bedside clinic,DOAP	Skill assessment	
GM 12.10	Interpret thyroid function tests in hypo and hyperthyroidism	K	KH	Y	LGT,SGT	Written/Viva voce	2
GM 12.11	Describe and discuss the iodisation programs of the government of India	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 12.12	Describe the pharmacology, indications, adverse reaction, interactions of thyroxine and antithyroid drugs	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 12.13	Write and communicate to the patient appropriately a prescription for thyroxine based on age, sex, and clinical and biochemical status	S/C	SH	Y	Skill Lab	Skill assessment	
GM 12.14	Describe and discuss the indications of thionamide therapy, radio iodine therapy and surgery in the management of thyrotoxicosis	K	KH	Y	Bedside clinic	Written/Viva voce	

Topic 13: Common Malignancies / Oncology

Number of competencies: (19)

Number of competencies that require certification : (NIL)

GM 13.1	Describe the clinical epidemiology and inherited & modifiable risk factors for common malignancies in India	K	K	Y	LGT,SGT	Short note/Viva Voice	
GM 13.2	Describe the genetic basis of selected cancers	K	K	Y	LGT,SGT	Short note/Viva Voice	
GM 13.3	Describe the relationship between infection and cancers	K	K	Y	LGT,SGT	Short note/Viva Voice	
GM 13.4	Describe the natural history, presentation, course, complications	K	K	N	LGT,SGT	Short note/Viva	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	and cause of death for common cancers					Voice	
GM 13.5	Describe the common issues encountered in patients at the end of life and principles of management of end-of-life care.	K	K	N	LGT,SGT	Short note/Viva Voice	
GM13.6	Describe and distinguish the difference between curative and palliative care in patients with cancer	K	K	N	LGT,SGT	Short note/Viva voice	
GM 13.7	Elicit document and present a history that will help establish the aetiology of cancer and includes the appropriate risk factors, duration and evolution	S	K	Y	Bedside clinic	Skill assessment/Short Case	
GM13.8	Perform and demonstrate a physical examination that includes an appropriate general and local examination that leads to the diagnosis, extent spread and complications of cancer	S	SH	Y	Bedside clinic	Skill assessment/Short case	
GM13.9	Demonstrate in a mannequin the correct technique for performing breast exam rectal examination and cervical examination and pap smear	S	K	Y	Bedside clinic	Skill assessment/Short Case	
GM13.10	Generate a differential diagnosis based on the presenting symptoms and clinical features in a cancer patient and identify the most likely diagnosis	S	K	Y	Bedside clinic	Skill assessment / Short Case	
GM13.11	Order and interpret diagnostic testing based on the clinical diagnosis in a cancer patient. Including CBC and stool occult blood and prostate specific antigen	S	K	K	Bedside clinic	Skill assessment/ Short case	
GM13.12	Describe the indications and interpret the results of Chest X Ray, mammogram, skin and tissue biopsies and tumor markers used in common cancers	K	KH	Y	Bedside clinic,SGT	Short note/Viva voice	
GM13.13	Describe and assess pain and suffering objectively in a patient with cancer	K	KH	Y	Bedside clinic,SGT	Short note/Vivavoice	
GM13.14	Describe the indications for surgery, radiation and chemotherapy for common malignancies	K	KH	Y	Bedside clinic,SGT	Short note/Viva Voice	
GM13.15	Describe the need, tests involved, their utility in the prevention of common malignancies	K	KH	Y	Bedside clinic,SGT	Short note/Viva Voice	
GM13.16	Demonstrate an understanding of needs and preferences of patients when choosing curative and palliative therapy	A/C	KH	Y	Bedside clinic,SGT	Short note/Viva voice	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM13.17	Describe and enumerate the indications, use, side effects of narcotics in pain alleviation in patients with cancer	K	KH	Y	Bedside clinic,SGT	Short note/Viva Voice	
GM13.18	Describe and discuss the ethical and the medico legal issues involved in end-of-life care	K	KH	Y	Bedside clinic,SGT	Short note/Viva Voice	
GM13.19	Describe the therapies used in alleviating suffering in patients at the end of life	K	KH	Y	Bedside clinic,SGT	Short note/Viva Voice	
Topic 14: Obesity		Number of competencies: (14)			Number of competencies that require certification : (NIL)		
GM 14.1	Define and measure obesity as it relates to the Indian population	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 14.2	Describe and discuss the aetiology of obesity including modifiable and non-modifiable risk factors and secondary causes	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 14.1	Define and measure obesity as it relates to the Indian population	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 14.2	Describe and discuss the aetiology of obesity including modifiable and non-modifiable risk factors and secondary causes	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 14.3	Describe and discuss the monogenic forms of obesity	K	KH	Y	LGT,SGT	Written/Viva voce	
GM 14.4	Describe and discuss the impact of environmental factors including eating habits, food, work, environment and physical activity on the incidence of obesity	K	K	Y	LGT,SGT	Written/Viva voce	
GM 14.5	Describe and discuss the natural history of obesity and its complications	K	K	Y	LGT,SGT	Written/Viva voce	
GM 14.6	Elicit and document and present an appropriate history that includes the natural history, dietary history, modifiable risk factors, family history clues for secondary causes and motivation to lose weight	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.7	Perform, document and demonstrate a physical examination based on the history that includes general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.9	Order and interpret diagnostic tests based on the clinical diagnosis	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	including blood glucose, lipids, thyroid function tests etc.						
GM 14.10	Describe the indications and interpret the results of tests for secondary causes of obesity	S	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.11	Communicate and counsel patient on behavioural, dietary and lifestyle modifications	C	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.12	Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way	A/C	SH	Y	Bedside clinic, Skill Lab	Skills assessment	
GM 14.13	Describe and enumerate the indications, pharmacology, and side effects of pharmacotherapy for obesity and describe and enumerate indications and side effects bariatric surgery	K	K	Y	LGT,SGT	Written/Viva voce	
GM 14.14	Describe and enumerate and educate patients, health care workers and the public on measures to prevent obesity and promote a healthy lifestyle	K	K	Y	LGT,SGT	Written/Viva voce	

Topic 15: GI Bleeding
Number of competencies: (18)
Number of competencies that require certification : (01)

GM 15.1	Enumerate, describe and discuss the aetiology of upper and lower GI bleeding	K	KH	Y	LGT, SGT (SGT)	Application based questions / Viva voce	
GM 15.2	Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents with acute volume loss and GI bleed	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 15.3	Describe and discuss the patho-physiological effects of acute blood and volume loss	K	KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 15.4	Elicit and document and present an appropriate history that identifies the route of bleeding, quantity, grade, volume loss, duration, etiology, comorbid illnesses and risk factors	S	SH	Y	Bedside clinic / Tutorial	Skills assessment - Short case/ OSCE/ Documentation in Journal	
GM 15.5	Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination	S	SH	Y	Bedside clinic / Tutorial	Skills assessment - Short case/OSCE Documentation in	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
						Journal	
GM 15.6	Distinguish between upper and lower gastrointestinal bleeding based on the clinical features	K	KH	Y	LGT, SGT	Application based questions Viva voce	
GM 15.7	Demonstrate the correct technique to perform an anal and rectal examination in a mannequin or equivalent	S	SH	Y	DOAP in skills lab	Skills assessment – OSCE on mannequin	
GM 15.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis	K	KH	Y	LGT, SGT/ Bedside clinic	Application based questions / Viva voce/ Short Case	
GM 15.9	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, PT and PTT, stool examination, occult blood, liver function tests, H. Pylori test.	S	SH	Y	Bedside clinic, SGT Tutorial	Skill assessment OSCE/viva Voce)	
GM 15.10	Enumerate the indications for endoscopy, colonoscopy and other Imaging competencies in the investigation of Upper GI bleeding	K	KH	Y	Bedside clinic, SGT Tutorial	Application based questions / Viva voce/	
GM 15.11	Develop, document and present a treatment plan that includes fluid resuscitation, blood and blood component transfusion, and specific therapy for arresting blood loss	K	KH	Y	LGT, SGT/ Tutorial	Application based questions / Viva voce	
GM 15.12	Enumerate the indications for whole blood, component and platelet transfusion and describe the clinical features and management of a mismatched transfusion	K	KH	Y	LGT, SGT/ Tutorial	Application based questions / Viva voce	
GM 15.13	Observe cross matching and blood / blood component transfusion	S	SH	Y	Bedside clinic, Direct observation in elective/ emergency Situation	Skill assessment (OSCE/viva Voce)	2
GM 15.14	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of vasopressors used in the treatment of Upper GI bleed	K	KH	Y	LGT, SGT/ Tutorial	Application based questions / Viva voce	
GM 15.15	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of acid peptic disease including Helicobacter pylori	K	K, KH	Y	LGT, SGT	Application based questions / Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 15.16	Enumerate the indications for endoscopic interventions and Surgery in patient with GI Bleeding	K	K, KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 15.17	Determine appropriate level of specialist consultation as per clinical, hemodynamic status of the patient with GI bleed	K	K	Y	SGT	Application based questions / Viva voce	
GM 15.18	Counsel the family and patient with GI Bleeding on the diagnosis and therapeutic options in an empathetic non-judgmental manner	S C	SH	Y	Bedside clinic, DOAP Role play	Skills assessment - OSCE	

Topic 16: Diarrheal Disorders		Number of competencies: (17)		Number of competencies that require certification : (NIL)			
GM 16.1	Describe and discuss the aetiology of acute and chronic diarrhea including infectious and non- infectious causes	K	K KH	Y	LGT, SGT	Application based questions / Viva voce	
GM 16.2	Describe and discuss the acute systemic consequences of diarrhea including its impact on fluid balance	K	K KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.3	Describe and discuss the chronic effects of diarrhea including malabsorption	K	K KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel, sexual history and other concomitant illnesses in a patient with Diarrhea	S	SH	Y	Bedside clinic, SGT	Skill assessment (Short case or OSCE)	
GM 16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination	S	SH	Y	Bedside clinic, DOAP session	Skill assessment (Short case / OSCE)	
GM 16.6	Distinguish between diarrhea and dysentery based on clinical features	K	KH	Y	Bedside clinic, SGT	Skill assessment (Short case / OSCE) Viva Voce	
GM 16.7	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis	K	KH	Y	Bedside clinic, SGT	Skill assessment (Long/short case) Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 16.8	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, and stool examination in a patient with acute/chronic diarrhea	S	SH	Y	Bedside clinic, SGT Tutorial	Skill assessment (OSCE/ viva Voce)	
GM 16.9	Identify common parasitic causes of diarrhea under the microscope in a stool specimen	S	SH	Y	DOAP	Skill assessment OSCE	
GM 16.10	Identify vibrio cholera in a hanging drop specimen	S	SH	Y	DOAP	Skill assessment OSCE	
GM 16.11	Enumerate the indications for stool cultures and blood cultures in patients with acute diarrhea	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.12	Enumerate and discuss the indications for further investigations including antibodies, colonoscopy, diagnostic Imaging and biopsy in the diagnosis of chronic diarrhea	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.13	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for parasitic causes of diarrhea	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.14	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for bacterial and viral diarrhea	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.15	Distinguish based on the clinical presentation Crohn's disease from Ulcerative Colitis	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.16	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy including Immunotherapy in a patient with chronic diarrhea	K	KH	Y	LGT SGT	Application based questions / Viva voce	
GM 16.17	Describe and enumerate the indications for surgery in inflammatory bowel disease	K	KH	Y	LGT SGT	Application based questions / Viva voce	
Topic 17: Headache		Number of competencies: (14)		Number of competencies that require certification : (01)			
GM 17.1	Define and classify headache and describe the presenting features,	K	KH	Y	LGT	Application based	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	precipitating factors, aggravating and relieving factors of various kinds of headache				SGT	question/ Viva voice	
GM 17.2	Elicit and document and present an appropriate history including aura, precipitating aggravating and relieving factors, associated symptoms that help identify the cause of headaches	S	SH	Y	Bedside clinic SGT	Skill assessment OSCE	
GM 17.3	Classify migraine and describe the distinguishing features between classical and non-classical forms of migraine	K	KH	Y	LGT SGT	Application based question/ Viva voice	
GM 17.4	Demonstrate a detailed neurologic examination in a patient of headache and raised intracranial tension including signs of meningitis	S	SH	Y	Bedside clinic SGT	Long case/ Short case Skill assessment, OSCE	
GM 17.5	Generate, document and present a differential diagnosis based on clinical features in a patient with headache.	S	SH	Y	Bedside clinic SGT	Long case/ Short case Skill assessment, OSCE	
GM 17.6	Choose and interpret diagnostic testing including Imaging based on clinical diagnosis in a patient with headache	S	SH	Y	Bedside clinic SGT	Skill assessment OSCE Viva voce	
GM17.7	Enumerate the indication of lumbar puncture and describe the findings in CSF in different types of meningitis.	K	KH	Y	LGT SGT	Application based question/ Viva voice	
GM17.8	Demonstrate in a mannequin or equivalent the correct technique for performing a lumbar puncture	S	SH	Y	DOAP Skills lab	Skill assessment OSCE	
GM17.9	Interpret the CSF findings with various parameters in a given CSF fluid analysis report	S	SH	Y	Bedside clinic SGT	Skill assessment OSCE, Viva voce	2
GM17.10	Enumerate the indications for emergency care admission and describe Immediate supportive care in patients with headache	K	KH	Y	LGT SGT	Application based question/ Viva voice	
GM17.11	Describe the indications, pharmacology, dose, side effects of abortive therapy in migraine	K	KH	Y	LGT SGT	Application based question/ Viva voice	
GM17.12	Describe the indications, pharmacology, dose, side effects of prophylactic therapy in migraine	K	KH	Y	LGT SGT	Application based question/ Viva voice	
GM17.13	Describe the pharmacology, dose, adverse reactions and regimens of drugs used in the treatment of bacterial, tubercular and viral meningitis	K	KH	Y	LGT SGT	Application based question/ Viva voice	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy	A/C	SH	Y	Bedside clinic DOAP	Skill assessment OSCE	
Topic 18 : Cerebrovascular Accident		Number of competencies: (16)		Number of competencies that require certification : (01)			
GM 18.1	Describe the functional and the vascular anatomy of the brain	K	KH	Y	LGT, SGT	Application based question /Viva voce	
GM 18.2	Classify cerebrovascular accidents and describe the aetiology, predisposing genetic and acquired risk factors and pathogenesis of haemorrhagic and non-haemorrhagic stroke	K	KH	Y	LGT, SGT	Application based question /Viva voce	
GM 18.3	Elicit and document and present an appropriate history in a cerebrovascular patient including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accidents	S	SH	Y	Bedside clinic, SGT	Long case /Short case Skills assessment OSCE	
GM 18.4	Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history in a stroke patient	S	SH	Y	Bedside clinic, DOAP	Long case /Short case Skills assessment OSCE	3
GM 18.5	Distinguish the lesion based on upper verses lower motor neuron, side, site and most probable nature of the lesion in a given patient with neurological symptoms/signs	K S	KH SH	Y	LGT Bedside clinic, DOAP	Application based question Long case /Short case, Skills assessment, OSCE	
GM 18.6	Elicit, document and present clinical examination of a stroke patient with speech disorder. Enumerate and describe the points for distinguishing the various disorders of speech based on site of lesion.	K S	KH SH	Y	Bedside clinic, DOAP	Application based question Long case /Short case, Skills assessment, OSCE	
GM18.7	Describe and distinguish, based on the clinical presentation, the types of bladder dysfunction seen in neurological diseases	K	KH	Y	LGT Bedside clinic, SGT	Application based question /Viva voice	
GM18.8	Choose and interpret the appropriate Imaging tests that will identify the anatomical site, type and etiology of the lesion in stroke patient	S	SH	Y	Bedside clinic, SGT	Skill assessment OSCE, Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM18.9	Choose and interpret the appropriate diagnostic testing in young patients with a cerebrovascular accident (CVA)	S	SH	Y	Bedside clinic, SGT	Skill assessment OSCE Viva voce	
GM 18.10	Describe the initial supportive management of a patient presenting with a cerebrovascular accident (CVA)	K	KH	Y	LGT SGT	Application based question /Viva voice	
GM 18.11	Describe management of non-haemorrhagic stroke including use of thrombolytic agents. Enumerate the indications and contraindications of thrombolytic agents in a stroke patient	K	KH	Y	LGT SGT	Application based question /Viva voice	
GM 18.12	Enumerate the indications and contraindications of antiplatelet agents in non-haemorrhagic stroke. Describe the role of antiplatelet agents in stroke patients.	K	KH	Y	LGT SGT	Application based question /Viva voice	
GM 18.13	Describe the management of a patient with haemorrhagic stroke.	K	KH	Y	LGT SGT	Application based question /Viva voice	
GM 18.14	Enumerate the indications for surgery in a haemorrhagic stroke	K	K	Y	LGT SGT	Written /Viva voice	
GM 18.15	Enumerate and describe the indications and modalities of multidisciplinary rehabilitation of patients with a CVA	K	KH	Y	LGT ,SGT, Bedside clinic	Application based question /Viva voice	
GM 18.16	Counsel regarding diagnosis, therapy, prognosis and outcome to patient with stroke and his/her family members in an empathetic manner	A/C	SH	Y	Bedside clinic DOAP	Skill assessment OSCE	
Topic 19: Movement Disorders		Number of competencies: (09)			Number of competencies that require certification : (NIL)		
GM 19.1	Describe the functional neuro-anatomy of the locomotor system of the brain	K	KH	Y	LGT, SGT	Application based question /Viva voce	
GM 19.2	Classify movement disorders of the brain based on distribution, rhythm, repetition, exacerbating and relieving factor	K	KH	Y	LGT, SGT	Application based question /Viva voce	
GM 19.3	Elicit and document and present an appropriate history including onset, progression precipitating, aggravating and relieving factors, associated symptoms that help identify the cause of the movement	S	SH	Y	Bedside clinic SGT	Short case Skill assessment OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	disorder						
GM 19.4	Perform, demonstrate and document a physical examination that includes a general examination and a detailed neurologic examination using standard movement rating scales	S	SH	Y	Bedside clinic SGT	Short case Skill assessment OSCE	
GM 19.5	Generate, document and present a differential diagnosis based on the history and physical examination in a patient with movement disorder	S	SH	Y	Bedside clinic SGT	Short case Skill assessment OSCE	
GM 19.6	Document and describe clinical diagnosis regarding the anatomical location, nature and cause of the lesion based on the clinical presentation and physical examination in a patient with movement disorder	S	SH	Y	Bedside clinic SGT	Short case Skill assessment OSCE	
GM 19.7	Choose and interpret diagnostic Imaging tests in the diagnosis of movement disorder	S	SH	Y	Bedside clinic SGT	Short case Skill assessment OSCE, Viva voce	
GM 19.8	Discuss and describe the pharmacology, their dose, side effects and interactions of the drugs used in the management of Parkinson's syndrome	K	KH	Y	LGT, SGT	Application based question /Viva voce	
GM 19.9	Enumerate the indications for use of surgery and botulinum toxin in the treatment of movement disorders	K	KH	Y	LGT, SGT	Written/Viva voce	

Topic 20: Seizure Disorders
Number of competencies: (05)
Number of competencies that require certification : (NIL)

GM 20.1	Define and differentiate between seizures, convulsions and epilepsy.	K	K	Y	LGT SGT	Application based question, Viva voce	
GM 20.2	Enumerate the etiological classification of epilepsy. Discuss the pathophysiology, clinical evaluation and diagnosis of epilepsy including description of how to recognize different types of epilepsy. Enumerate and discuss the diagnostic tests in epilepsy.	K	KH	Y	LGT SGT	Application based question, Viva voce	
GM20.3	Discuss the management of epilepsy including various antiepileptic medications, their usage and drug interactions.	K	KH	Y	LGT SGT	Application based question, Viva voce	
GM 20.4	Counsel the patient and relatives regarding the safety precautions to be taken during and after an episode of seizure. Demonstrate	S/A/C	SH	Y	Bedside clinic DOAP	Skills assessment OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	patient education on lifestyle modifications including sleep patterns, stress management, alcohol or drug avoidance.				Role play		
GM 20.5	Discuss acute management of seizure episode	K	KH	Y	LGT, SGT	Application based question, Viva voce	

Topic 21: Envenomation **Number of competencies: (09)** **Number of competencies that require certification : (NIL)**

GM21.1	Enumerate the local poisonous snakes and describe the distinguishing marks of each	K	K/ KH	Y	LGT SGT	MCQ/Written/ Viva voce	
GM21.2	Describe and demonstrate in a volunteer or a mannequin and educate (to other health care workers/patients) the correct initial management of patient with a snake bite in the field	K S	KH SH	Y	LGT SGT DOAP	Skill assessment OSCE Viva voce	
GM21.3	Describe the initial approach to the stabilisation of the patient who presents with snake bite	K	KH	Y	LGT SGT	Application based question / Viva voce	
GM21.4	Elicit and document and present an appropriate history, the circumstances, time, kind of snake, evolution of symptoms in a patient with snake bite	S	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE Viva voce	
GM21.5	Perform a systematic examination, document and present a physical examination that includes general examination, local examination, appropriate cardiac and neurologic examination in a patient with snake bite	S	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE Viva voce	
GM21.6	Choose and interpret the appropriate diagnostic tests in patients with snake bite	S	SH	Y	Bedside clinic SGT	Skill assessment OSCE / Viva voce	
GM21.7	Enumerate the indications and describe the pharmacology, dose, adverse reactions, hypersensitivity reactions of anti-snake venom	K	KH	Y	LGTSGT	Written/MCQ / Viva voce	
GM21.8	Describe the diagnosis, initial approach, stabilisation and therapy of scorpion envenomation	K	KH	Y	LGTSGT	Written/MCQ / Viva voce	
GM21.9	Describe the diagnosis, initial approach, stabilisation and therapy of bee sting and other envenomation	K	KH	N	LGTSGT	Written/ MCQ / Viva voce	

Topic 22: Poisoning **Number of competencies: (13)** **Number of competencies that require certification : (NIL)**

GM22.1	Describe the initial approach to the stabilisation of the patient who presents with poisoning	K	KH	Y	LGT, SGT	Application based question, Viva voce	
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM22.2	Enumerate the common plant poisons seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification	K	K KH	Y	LGT, SGT	MCQ/Written, Viva voce	
GM 22.3	Enumerate the common corrosives used in your area and describe their toxicology, clinical features, prognosis and approach to therapy	K	KH	Y	LGT, SGT	MCQ/Written, Viva voce	
GM 22.4	Enumerate the commonly observed drug overdose in your area and describe their toxicology, clinical features, prognosis and approach to therapy	K	KH	Y	LGT, SGT	MCQ/ Written, Viva voce	
GM22.5	Identify and describe a pathophysiologic pattern or toxic syndrome (toxicidrome) based on the observed findings	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM22.6	Describe and discuss the toxicology, clinical features, complications, prognosis and specific approach to management of common insecticide poisoning (Organophosphate and carbamate poisoning).	K	KH	Y	LGT, SGT	MCQ/Written, Viva voce	
GM22.7	Describe and discuss the clinical features, prognosis and management of aluminium phosphide and zinc phosphide poisoning.	K	KH	Y	LGT, SGT	MCQ/Written, Viva voce	
GM22.8	Describe and discuss the clinical features, prognosis and management of Methanol and Ethylene glycol poisoning	K	KH	Y	LGT, SGT	MCQ/Written, Viva voce	
GM22.9	Observe and describe the functions and role of a poison centre in suspected poisoning	K	KH	Y	Centre visit - SGT	Log book documentation Viva voce	
GM22.10	Describe the medico legal aspects of suspected suicidal or homicidal poisoning	K	KH	Y	LGT, SGT,	Written Viva voce	
GM22.11	Demonstrate the correct procedure to write a medico legal report on a suspected poisoning	S	SH	Y	DOAP SGT	Skill assessment OSCE	
GM22.12	Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy	A/C	SH	Y	DOAP	Skill assessment OSCE	
GM22.13	Enumerate the indications for psychiatric consultation and describe the precautions to be taken in a patient with suspected suicidal ideation / gesture	K	KH	Y	SGT	MCQ/Written Viva voce	

Topic 23: Mineral, Fluid Electrolyte and Acid base Disorder

Number of competencies: (12)

Number of competencies that require certification : (NIL)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 23.1	Enumerate the causes of hypercalcemia and distinguish the features of PTH vs non PTH mediated hypercalcemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.2	Describe the aetiology, clinical manifestations, diagnosis and clinical approach to primary hyperparathyroidism	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.3	Describe the approach to the management of hypercalcemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.4	Enumerate the causes and describe the clinical features and the correct approach to the diagnosis and management for a patient with hyponatremia	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.5	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hyponatremia	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.6	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hypokalemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 23.7	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hyperkalemia	K	KH	Y	LGT, SGT	Written/ Viva voce/application based questions	
GM 23.8	Enumerate the causes and describe the clinical and laboratory features of metabolic acidosis	K	KH	Y	LGT, SGT	Written/ Viva voce/application based questions	
GM 23.9	Enumerate the causes and describe the clinical and laboratory features of metabolic alkalosis	K	KH	Y	LGT, SGT	Written/ Viva voce/MCQ	
GM 23.10	Enumerate the causes and describe the clinical and laboratory features of respiratory acidosis	K	KH	Y	LGT, SGT	Written/ Viva voce/MCQ	
GM 23.11	Enumerate the causes and describe the clinical and laboratory features of respiratory alkalosis	K	KH	Y	LGT, SGT	Written/ Viva voce/MCQ	
GM 23.12	Identify the underlying acid-based disorder based on an ABG report and interpret it in the context of clinical situation	K	KH	Y	LGT, SGT	Written/ Viva voce/MCQ	
Topic: 24 Nutritional and Vitamin Deficiencies		Number of competencies: (05)			Number of competencies that require certification : (NIL)		
GM 24.1	Discuss and describe the methods of nutritional assessment in	K	KH	Y	LGT, SGT	Application	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	an adult and calculation of caloric requirements during illnesses					based questions/Written/Viva voce	
GM 24.2	Discuss and describe the causes and consequences of protein-caloric malnutrition in the hospital	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 24.3	Discuss and describe the aetiology, causes, clinical manifestations, complications, diagnosis and management of common vitamin deficiencies	K	KH	Y	LGT, SGT	Application based questions/Written/Viva voce	
GM 24.4	Enumerate the indications for enteral and parenteral nutrition in critically ill patients	K	KH	Y	LGT, SGT	Written/ Viva voce	
GM 24.5	Counsel and communicate to patients in a simulated environment on an appropriate balanced diet	S	SH	Y	DOAP	Skill assessment/OSCE	

Topic 25: Geriatrics
Number of competencies: (22)
Number of competencies that require certification : (NIL)

GM 25.1	Describe and discuss the epidemiology, pathogenesis, clinical evolution, presentation and course of common diseases in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM 25.2	Describe the multidimensional geriatric assessments that includes medical, psycho-social and functional components	K	K	Y	Bedside clinic, DOAP	Skill assessment /OSCE	
GM 25.3	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of acute confusional states	K	KH	Y	LGT, SGT	Written/viva voice	
GM 25.4	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vascular events in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM 25.5	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of depression in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM 25.6	Describe the etiopathogenesis and clinical presentation of dementia in the elderly. Describe the acute care, stabilization, management and rehabilitation of dementia in elderly	K	KH	Y	LGT, SGT	Written/viva voice	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM25.7	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of personality changes in the Elderly	K	KH	N	LGT, SGT	Written/viva voice	
GM25.8	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of osteoporosis in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.9	Describe and discuss the aetiopathogenesis clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of CVA in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.10	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of COPD in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.11	Describe and discuss the functional changes, acute care, stabilization, management and rehabilitation of the elderly undergoing surgery	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.12	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of degenerative joint disease	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.13	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of falls in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.14	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of common fractures in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.15	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision abnormalities and visual loss in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.16	Describe and discuss the principles of physical and social rehabilitation, functional assessment, role of physiotherapy and occupational therapy in the management of disability in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM25.17	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of hearing loss in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.18	Describe the Impact of the demographic changes in ageing on the population	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.19	Enumerate and describe the social problems in the elderly including isolation, abuse, change in family structure and their impact on Health	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.20	Enumerate and describe social interventions in the care of elderly including domiciliary services, rehabilitation facilities, old age homes and state interventions	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.21	Enumerate and describe ethical issues in the care of the elderly	K	KH	Y	LGT, SGT	Written/viva voice	
GM25.22	Describe and discuss the aetiopathogenesis, clinical presentation, complications, assessment and management of nutritional disorders in the elderly	K	KH	Y	LGT, SGT	Written/viva voice	

Topic 26: Infectious Diseases
Number of competencies: (35)
Number of competencies that require certification : (NIL)

GM 26.1	Describe and discuss the molecular mechanisms of microbial pathogenesis.	K	KH	Y	LGT SGT	Application based question, Viva voce	
GM26.2	Discuss the approach to a patient with an Infectious Disease.	K	KH	Y	LGT SGT	Application based question Viva voce	
GM 26.3	Elicit document and present a medical history that helps delineate the aetiology of infectious diseases that includes the evolution and pattern of symptoms, risk factors, exposure through occupation and Travel	S	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE	
GM 26.4	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin, mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)	S	SH	Y	Bedside clinic, DOAP	Skill assessment OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 26.5	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, blood biochemistry, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool	K	KH	Y	LGT Bedside clinic, DOAP	Skill assessment OSCE	
GM 26.6	Enumerate and describe the indications for use of newer techniques in the diagnosis of these infections	K	K KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM 26.7	Discuss the approach to the Acutely Ill Infected Febrile Patient	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM 26.8	Describe and discuss the common causes, clinical features and management of infections of the Skin, Muscles and Soft Tissues.	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM 26.9	Describe and discuss the common causes, clinical features and management of liver and other Visceral abscesses.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 26.10	Describe and discuss the common causes, clinical features and management of acute infectious diarrheal diseases and bacterial food poisoning.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 26.11	Describe and discuss the common causes, clinical features and management of Urinary Tract Infections, Pyelonephritis, and Prostatitis.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 26.12	Describe and discuss the common causes, clinical features and management of encephalitis and meningitis.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 26.13	Describe and discuss the etiology, pathogenesis, clinical features and management of Clostridial infections like tetanus, botulism and gas gangrene.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM26.14	Describe and discuss the common causes, clinical features and management OF diseases caused by Gram-Negative Enteric Bacilli.	K	KH	N	LGT, SGT	Application based question / Viva voce	
GM26.15	Describe and discuss the etiopathogenesis, clinical features, complications and management of Helicobacter pylori Infections.	K	KH	Y	LGT, SGT	Application based question / Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM26.16	Describe and discuss the clinical features, complications and management OF infections due to Pseudomonas and Burkholderia Species.	K	KH	N	LGT, SGT	MCQ/Written / Viva voce	
GM26.17	Describe and discuss the etiopathogenesis, clinical features, complications and management of enteric fever.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM26.18	Describe and discuss the common causes, etiopathogenesis, clinical features and management of bacterial zoonotic diseases like Leptospirosis, Brucellosis, Plague and Anthrax.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM26.19	Describe and discuss the pathogenesis, clinical features and management of common diseases caused by Actinomycosis and Nocardia.	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.20	Describe and discuss the pathogenesis, clinical features and management of Rickettsial diseases especially of typhus group (Scrub typhus, epidemic typhus and endemic typhus).	K	KH	N	LGT, SGT	MCQ/Written / Viva voce	
GM26.21	Describe and discuss the etiopathogenesis, clinical features, complications and management of Herpes Simplex Virus Infections.	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.22	Describe and discuss the etiopathogenesis, clinical features, complications and management of Varicella-Zoster Virus Infections	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.23	Describe and discuss the etiopathogenesis, clinical features, complications and management of Common Viral Respiratory Infections, Including COVID-19, SARS, Influenza.	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.24	Describe and discuss the etiopathogenesis, clinical features, management and prevention of Rabies.	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.25	Describe and discuss the etiopathogenesis, clinical features, complications and management of Dengue.	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM26.26	Describe and discuss the etiopathogenesis, clinical features and management of candidiasis.	K	KH	N	LGT, SGT	MCQ/Written / Viva voce	
GM26.27	Describe and discuss the etiopathogenesis, clinical features, and management of Aspergillosis	K	KH	N	LGT, SGT	MCQ/Written / Viva voce	
GM26.28	Describe and discuss the etiopathogenesis, clinical features, complications and management of Amebiasis.	K	KH	Y	LGT, SGT	Application based question	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
						/ Viva voce	
GM26.29	Describe and discuss the etiopathogenesis, clinical features, complications and management of Malaria	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM26.30	Prescribe drugs for malaria based on the species identified, prevalence of drug resistance and national programs.	K	KH	Y	SGT	Sill assessment	
GM26.31	Describe and discuss the etiopathogenesis, clinical features and management of Leishmaniasis.	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 26.32	Describe and discuss the etiopathogenesis, clinical features and management of Filarial disease.	K	KH	Y	LGT, SGT	MCQ/Written / Viva voce	
GM26.33	Describe and discuss the etiopathogenesis, clinical features, complications and management of Cysticercosis.	K	KH	N	LGT, SGT	MCQ/Written / Viva voce	
GM26.34	Communicate to the patient and family the diagnosis and treatment of identified infection	C	SH	Y	Bedside clinic DOAP	Skill assessment OSCE	
GM26.35	Counsel the patient and family on prevention of various infections due to environmental issues	C	SH	Y	Bedside clinic DOAP	Skill assessment OSCE	

Topic 27: Tuberculosis
Number of competencies: (15)
Number of competencies that require certification : (01)

GM 27.1	Describe and discuss the epidemiology of tuberculosis and its impact on the work, life and economy of India	K	KH	Y	LGT, SGT	Application based question, Viva voce	
GM 27.2	Describe and discuss the microbiology of tubercle bacillus, mode of transmission, pathogenesis, clinical evolution and natural history of pulmonary and extra pulmonary forms (including lymph node, bone and CNS)	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 27.3	Discuss and describe the impact of co-infection with HIV and other co-morbid conditions such as diabetes on the natural history of tuberculosis	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 27.4	Describe the epidemiology, the predisposing factors, microbial and therapeutic factors that determine resistance to anti-tubercular drugs	K	KH	Y	LGT, SGT	Application based question / Viva voce	
GM 27.5	Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough, fever,	S	SH	Y	Bed side clinic, DOAP session	Short/long case , Skill assessment -	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	anorexia, weight loss, hemoptysis and symptoms of extra-pulmonary manifestations					OSCE	
GM 27.6	Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a) general examination, b) examination of the chest and lung including loss of volume, mediastinal shift, percussion and auscultation of lung sounds and added sounds c) examination of the lymphatic system and d) relevant CNS examination	S	SH	Y	Bed side clinic, DOAP session	Short/long case Skill assessment – OSCE	
GM 27.7	Interpret a PPD (Mantoux Test) and describe and discuss the indications and pitfalls of the test	K	KH	Y	Bedside clinic, SGT	MCQ/Written Viva voce	
GM 27.8	Generate a differential diagnosis based on the clinical history and evolution of the disease that prioritizes the most likely diagnosis in patient with history/ examination findings suggestive of Tuberculosis	S	SH	Y	Bedside clinic, Small group discussion	Long case /short case, Skill assessment, OSCE	
GM 27.9	Order and interpret diagnostic tests based on the clinical presentation in patient with history/ examination findings suggestive of Tuberculosis including: CBC, Chest X ray PA view, Mantoux Test, sputum smear, culture and sensitivity, pleural fluid examination and culture, HIV testing	K S	KH SH	Y	Bedside clinic, DOAP session	Long case /short case Skill assessment – OSCE, Viva voce	
GM 27.10	Interpret a sputum gram stain and AFB with antibiotic sensitivity test from a given report	S	SH	Y	DOAP Tutorial	Skill assessment OSCE	
GM 27.11	Enumerate and describe the indications for tests including: serology, special cultures, Polymerase Chain Reaction and anti-tubercular drug sensitivity testing	K	KH	Y	SGT, LGT	Short note/ Viva voce	
GM 27.12	Describe and discuss the origin, indications, technique of administration, efficacy and complications of the BCG vaccine	K	KH	Y	LGT, SGT discussion	Short note/ Viva Voce	
GM 27.13	Describe and discuss the pharmacology of various anti-tuberculous agents, their indications, contraindications, interactions and adverse reactions	K	KH	Y	LGT, SGT discussion	Short note/ Viva voce	
GM 27.14	Prescribe an appropriate anti-tuberculosis Regimen based on the location of disease, smear positivity and negativity and comorbidities based on current national guidelines including	K S	KH SH	Y	LGT Bedside clinic, SGT,	Application based question Skill assessment-	2

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	directly observed tuberculosis therapy (DOTS)					OSCE, Viva voce	
GM 27.15	Describe the appropriate precautions, screening, testing and indications for chemoprophylaxis for contacts and exposed health care workers	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 27.16	Define criteria for the cure of Tuberculosis; describe and recognize the features of drug-resistant tuberculosis, prevention and therapeutic regimens	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 27.17	Educate health care workers on National Program of Tuberculosis and administering and monitoring the DOTS program	K C/S	KH SH	Y	DOAP	Skill assessment OSCE Viva voce	
GM 27.18	Communicate with patients and family in an empathetic manner about the diagnosis and therapy of tuberculosis.	S	SH	Y	Bedside clinic DOAP	Skill assessment OSCE	
Topic 28: Obstructive Airway Diseases		Number of competencies: (26)		Number of competencies that require certification : (01)			
GM 28.1	Define and classify obstructive airway disease	K	K	Y	LGT, SGT	MCQs/Written/ Viva Voce	
GM 28.2	Describe and discuss the epidemiology, risk factors and evolution of obstructive airway disease	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 28.3	Enumerate and describe the causes of acute episodes in patients with obstructive airway disease	K	KH	Y	LGT, SGT	MCQ/ Application based question/ Viva voce	
GM 28.4	Describe and discuss the physiology and pathophysiology of hypoxia and hypercapnia	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 28.5	Describe and discuss the genetics of alpha 1 antitrypsin deficiency in emphysema	K	KH	N	LGT, SGT	Application based question/ Viva voce	
GM 28.6	Describe the role of the environment in the cause and exacerbation of obstructive airway disease	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 28.7	Describe and discuss allergic and non-allergic precipitants of obstructive airway disease	K	KH	Y	LGT, SGT	Application based question/ Viva voce	
GM 28.8	Elicit document and present a medical history that will differentiate the aetiologies of obstructive airway disease, severity and precipitants	S	SH	Y	Bed side clinic, DOAP	Long case/ short case Skill assessment, OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 28.9	Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation, pleural effusion and pneumothorax	S	SH	Y	Bed side clinic, DOAP	Long case/ short case Skill assessment OSCE	
GM 28.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	S	SH	Y	Bed side clinic, DOAP session	Long case/ short case, Skill assessment OSCE	
GM 28.11	Describe, discuss and interpret pulmonary function tests	K S	KH SH	Y	Bed side clinic, DOAP session	MCQ/Written Skill assessment OSCE	2
GM 28.12	Perform and interpret peak expiratory flow rate	S	P	Y	Bed side clinic, DOAP session	Documentation in logbook Skill assessment OSCE	
GM 28.13	Describe the appropriate diagnostic work up based on the presumed aetiology in patient with Obstructive Airway Disease	S	SH	Y	Bed side clinic, DOAP session	Long case/ short case, Skill assessment Viva voce, OSCE	
GM 28.14	Enumerate the indications for and interpret the results of : Pulse Oximetry, ABG, Chest Radiograph	K	KH	Y	Bed side clinic, SGT DOAP Session	MCQ/ Written Skill assessment Viva voce OSCE	
GM 28.15	Discuss and describe therapies for OAD including bronchodilators, leukotriene inhibitors, mast cell stabilizers, theophylline, inhaled and systemic steroids, oxygen and immunotherapy	K	KH	Y	LGT, SGT	MCQ/ Written Viva voce	
GM 28.16	Describe and discuss the indications for vaccinations in OAD	K	KH	Y	LGT, SGT	MCQ/ Written Viva voce	
GM 28.17	Develop a therapeutic plan including use of bronchodilators and inhaled corticosteroids	K S	KH SH	Y	Bed side clinic, SGT DOAP Session	MCQ/ Written Skill assessment Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
						OSCE	
GM 28.18	Develop a management plan for acute exacerbations including bronchodilators, systemic steroids, Antimicrobial therapy	K S	KH SH	Y	Bed side clinic, SGT DOAP Session	MCQ/ Written Skill assessment Viva voce OSCE	
GM 28.19	Describe and discuss the principles and use of oxygen therapy in the hospital and at home	K	KH	Y	LGT, SGT	MCQ/ Written Viva voce	
GM 28.20	Describe discuss and counsel patients appropriately on smoking cessation	K C	KH SH	Y	DOAP Role play	Viva voce Skills assessment OSCE	
GM 28.21	Demonstrate and counsel patient on the correct use of inhalers	S C	SH	Y	DOAP Role play	Skill assessment OSCE	
GM 28.22	Communicate diagnosis, treatment plan and subsequent follow up plan to patients	S C	SH	Y	DOAP Role play	Skill assessment OSCE	
GM 28.23	Discuss and describe the impact of OAD on patient's quality of life, wellbeing, work, family, society and workplace	K	KH	Y	LGT, SGT discussion	Application based question/ Viva voce	
GM 28.24	Discuss and describe preventive measures to reduce OAD in workplaces	K	KH	Y	LGT, SGT discussion	Application based question/ Viva voce	
GM 28.25	Demonstrate an understanding of patient's inability to change working, living and environmental factors that influence progression of airway disease	A C	SH	Y	SGT, Bedside clinics Role play	Observation by faculty OSCE	
GM 28.26	Demonstrate an understanding for the difficulties faced by patients during smoking cessation	A C	SH	Y	SGT, Bedside clinics Role play	Observation by faculty OSCE	
Topic 29: The role of the physician in the community		Number of competencies: (26)			Number of competencies that require certification : (NIL)		
GM 29.1	Describe and discuss the role of non-maleficence as a guiding principle in patient care	K	KH	Y	Bedside clinic, SGT	Application based questions/ Viva Voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 29.2	Describe and discuss the role of autonomy and shared responsibility as a guiding principle in patient care	K	KH	Y	Bedside clinic, SGT	Application based questions/ Viva Voce	
GM 29.3	Describe and discuss the role of beneficence of a guiding principle in patient care	K	KH	Y	Bedside clinic, SGT	Application based questions/ Viva Voce	
GM 29.4	Identify, discuss and defend medico-legal, sociocultural, economic and ethical issues as it pertains to rights, equity and justice in access to health care	K	KH	Y	Bedside clinic, SGT	Application based questions/ Viva Voce	
GM 29.5	Identify, discuss and defend medico-legal, socio-cultural and ethical issues as it pertains to decision making in health care including advanced directives and surrogate decision making	K	KH	Y	SGT	Application based questions/ Viva Voce	
GM 29.6	Identify, discuss and defend medico-legal, socio-cultural and ethical issues as it pertains to decision making in emergency care including situations where patients do not have the capability or capacity to give consent	K	KH	Y	Bedside clinic, SGT	Application based questions/ Viva Voce	
GM 29.7	Identify, discuss and defend medico-legal, socio-cultural and ethical issues as it pertains to research in study participants	K	KH	Y	SGT	Application based questions/ Viva Voce	
GM 29.8	Demonstrate ability to work in a team of peers and superiors	S	SH	Y	Bedside clinic, SGT – Role Play	Skill assessment (Formative)	
GM 29.9	Demonstrate respect to patient privacy	S	SH	Y	Bedside clinic, SGT – Role play	Skill assessment OSCE	
GM 29.10	Demonstrate ability to maintain confidentiality in patient care	S	SH	Y	Bedside clinic, SGT – Role play	Skill assessment OSCE	
GM 29.11	Demonstrate a commitment to continued learning	S	SH	Y	Bedside clinic, SGT Reflections writing	Skill assessment (Formative)/ Viva voce	
GM 29.12	Demonstrate responsibility and work ethics while working in the health care team	S	SH	Y	Bedside clinic, DOAP, Role play	Skill assessment Formative)/ Viva voce	
GM 29.13	Demonstrate ability to maintain required documentation in health care (including correct use of medical records)	S	SH	Y	SGT	Skill assessment Formative) / Viva voce	
GM 29.14	Demonstrate personal grooming that is adequate and appropriate for health care responsibilities	S	SH	Y	SGT Role play	Skill assessment Formative)	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
GM 29.15	Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning	S	SH	Y	SGT	Skill assessment Formative)/ Viva voce	
GM 29.16	Demonstrate awareness of limitations and seeks help and consultations appropriately	S	SH	Y	Bedside clinic, DOAP Role play	Skill assessment Formative/ Viva voce	
GM 29.17	Demonstrate ability to balance personal and professional priorities	S	SH	N	SGT Role plays Role modelling	Skill assessment Formative / Viva voce	
GM 29.18	Demonstrate ability to manage time appropriately	S	SH	Y	SGT Role plays	Skill assessment Formative / Viva voce	
GM 29.19	Demonstrate ability to form and function in appropriate professional networks	S	SH	N	SGT	Skill assessment Formative/ Viva voce	
GM 29.20	Demonstrate ability to pursue and seek career advancement	S	SH	N	SGT	Skill assessment Formative / Viva voce	
GM 29.21	Demonstrate ability to follow risk management and medical error reduction practices where appropriate	S	SH	N	SGT Role play	Skill assessment Formative / Viva voce	
GM 29.22	Demonstrate ability to work in a mentoring relationship with junior colleagues	S	SH	N	SGT	Skill assessment Formative / Viva voce	
GM 29.23	Demonstrate commitment to learning and scholarship	S	SH	N	SGT	Skill assessment Formative / Viva voce	
GM 29.24	Identify, discuss and defend medico-legal, socio-cultural professional and ethical issues in dealing with Impaired physicians	K	KH	N	SGT	Application based questions/ Viva Voce	
GM 29.25	Demonstrate altruism	S	SH	Y	SGT Role play Role modelling	Skill assessment, OSCE	
GM 29.26	Administer informed consent and appropriately address patient queries to a patient being enrolled in a research protocol in a simulated environment	S	SH	Y	Bedside clinic, DOAP Role play	Skill assessment OSCE	

PEDIATRICS (CODE: PE)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
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PEDIATRICS(Topics:35, Competencies: 406)

Topic 1: Normal Growth and Development Number of competencies: (03) Number of competencies that require certification: (NIL)

PE1.1	Define the terminologies Growth and development and describe the factors affecting normal growth.	K	KH	Y	LGT,SGT	Written/Vivavoce	
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE1.2	Describe the methods of assessment of growth including use of WHO and Indian national standards. Enumerate the parameters used for assessment of physical growth in infants, children and adolescents and Perform Anthropometric measurements, document in growth-charts and interpret.	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE1.3	Define development and Describe the normal developmental milestones with respect to motor, behaviour, social, adaptive and language. Discuss the factors affecting development and describe the assessment methods of development.	K	KH	Y	LGT,SGT	Written/Vivavoce	

Topic2: Common problems related to Growth Number of competencies:(03) Number of competencies that require certification: (NIL)

PE2.1	Discusses the pathogenesis, clinical features, assessment and management of a child who fails to thrive	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE2.2	Counselling the parent of a child with failure to thrive.	A/C	SH	Y	OSPE	Document in Logbook	

PE2.3	Discuss the etio-pathogenesis, clinical features and management of a child with short stature. Assessment of a child with short stature.	K	KH	Y	LGT,SGT	Written/Vivavoce	
Topic 3: Common problems related to Development-1 (Developmental delay, Cerebral palsy)		Number of competencies:(04)		Number of competencies that require certification:(NIL)			
PE3.1	Define developmental delay. Describe the causes of developmental delay and disability including intellectual disability in children	K	K	Y	LGT,SGT	Written/Vivavoce	
PE3.2	Explain the approach to a child with developmental delay	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE3.3	Counsel a parent of a child with developmental delay	S+C	SH	Y	DOAP	Document in LogBook	
PE3.4	Visit a Child Developmental Unit and observe its functioning	S	KH	Y	LGT, SGT	Logbook Entry	
Topic 4: Common problems related to Development-2 (Autism, ADHD)		Number of competencies: (02)		Number of competencies that require certification: (NIL)			
PE4.1	Describe the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)	K	K	N	LGT,SGT	Written	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE4.2	Describe the etiology, clinical features, diagnosis and management of a child with Autism	K	K	N	LGT,SGT	Written	
Topic 5: Common problems related to behavior		Number of competencies: (04)		Number of competencies that require certification: (NIL)			
PE5.1	Describe the clinical features, diagnosis and management of Feeding problems	K	K	N	LGT,SGT	Written	
PE5.2	Describe the clinical features, diagnosis and management of Breath Holding spells	K	K	N	LGT,SGT	Written/Vivavoce	
PE5.3	Describe the clinical features, diagnosis and management of temper tantrums and Pica	K	K	N	LGT,SGT	Written/Vivavoce	
PE5.4	Explain the etiology, clinical features and management of Enuresis	K	K	N	LGT,SGT	Written/Vivavoce	
Topic 6: Adolescent Health & common problems related to Adolescent Health		Number of competencies: (12)		Number of competencies that require certification: (NIL)			
PE6.1	Define Adolescence and Describe the stages of adolescence	K	K	Y	LGT,SGT	Written/Vivavoce	

PE6.2	Describe the physical, physiological and psychological changes during adolescence (Puberty)	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE6.3	Describe the general health problems during adolescence	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE6.4	Describe adolescent sexuality and common problems related to it	K	KH	N	LGT,SGT	Written/Vivavoce	
PE6.5	Describe the common Adolescent eating disorders (Anorexia Nervosa, Bulimia)	K	KH	N	LGT,SGT	Written/Vivavoce	
PE6.6	Describe the common mental health problems during adolescence	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE6.7	Respecting patient privacy and maintaining confidentiality while dealing with adolescence	A	SH	Y	Bedside clinics	Document in log book	
PE6.8	Perform routine Adolescent Health check up including eliciting history, performing examination including SMR (Sex Maturity Rating), growth assessments(usingGrowthcharts)andsystemic exam including thyroid and Breast exam and the HEADSS screening	S	SH	Y	Bedside clinics	Skillsstation	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE6.9	Explain the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria	K	K	N	LGT,SGT	Written/Viva voce	
PE6.10	Visit to the Adolescent Clinic	S	KH	Y	DOAP	Document in Log Book	
PE6.11	Enumerate the importance of obesity and other NCD in adolescents	K	K	Y	LGT,SGT	Written/Viva voce	
PE6.12	Enumerate the prevalence and importance of recognition of sexual abuse and drug abuse in adolescents and children	K	K	N	LGT,SGT	Written/Viva voce	

Topic 7: To promote and support optimal Breast feeding for Infants Number of competencies: (08) Number of competencies that require certification: (01)

PE7.1	Awareness on the cultural beliefs and practices of breastfeeding and explain physiology of lactation	K	K	N	LGT,SGT	Viva	
PE7.2	Describe the composition and types of breast milk and discuss the differences between cow's milk and Human milk	K	KH	Y	LGT,debate	Written/Vivavoce	
PE7.3	Describe the advantages of breast milk	K	KH	Y	LGT,SGT	Written/Vivavoce	

PE7.4	Observe the correct technique of breastfeeding and distinguish right from wrong techniques	S	P	Y	Bedside clinics, Skills lab	Skill assessment	3
PE7.5	Enumerate the baby friendly hospital initiatives	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE7.6	Describe the principles of IYCF (Infant and Young Child Feeding)	K	KH	N	SGT	Viva voce	
PE7.7	Participate in World Breastfeeding Week (WBW) celebration at your institute	K,S,C	SH,P	N	Outreach activities		
PE7.8	Describe the structure and functioning of human milk bank and visit the nearest human milk bank	K,C	KH	N	SGT	Viva voce	

Topic 8: Complementary Feeding
Number of competencies : (05)
Number of competencies that require certification: (NIL)

PE8.1	Define the term Complementary Feeding	K	K	Y	LGT,SGT	Written/Vivavoce	
PE8.2	Explain the principles, the initiation, attributes, frequency, techniques and hygiene related to Complementary Feeding.	K	KH	Y	LGT,SGT	Written/Vivavoce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE8.3	Enumerate the common complementary foods	K	K	Y	LGT,SGT	Written/Vivavoce	
PE8.4	Elicit history on the Complementary Feeding habits	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE8.5	Counsel and educate mothers on the best practices in Complementary Feeding	A/C	SH	Y	DOAP	Document in Log Book	

Topic 9: Normal nutrition, assessment and monitoring
Number of competencies : (07)
Number of competencies that require certification: (NIL)

PE9.1	Describe age-related nutritional needs of infants, children and adolescents including micronutrients and vitamins	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE9.2	Describe the tools and methods for assessment and classification of nutritional status of infants, children and adolescents	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE9.3	Explain the Calorific value of common Indian foods	K	K	Y	LGT,SGT	Written/Vivavoce	
PE9.4	Elicit document and present an appropriate nutritional history and perform a dietary recall	S	SH	Y	Bedside clinic, Skills lab	Skill assessment	

PE9.5	Calculate the age-related calorie requirement in Health and Disease, and identify gap	S	SH	Y	Bedside clinics,SGT	Skill assessment	
PE9.6	Assess and classify the nutrition status of infants, children and adolescents and recognize deviations	S	SH	Y	Bedside clinic,SGT	Skill assessment	
PE9.7	Plan an appropriate diet in health and disease	S	SH	N	Bedside clinic,SGT	Document in logbook	
Topic 10: Provide nutritional support, assessment and monitoring for common nutritional problems				Number of competencies: (06)		Number of competencies that require certification: (NIL)	
PE10.1	Define and describe the etio-pathogenesis, classify including WHO classification, clinical features, complication and management of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE10.2	Outline the clinical approach to a child with SAM and MAM	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE10.3	Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community based intervention, rehabilitation and prevention	S	SH	Y	Bedside clinics, Skills lab	Skill station	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE10.4	Counsel parents of children with SAM and MAM	S	SH	Y	Bedside clinic, Skills Station	Document in Logbook	
PE10.5	Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets	K	K	N	LGT,SGT	Written/Vivavoce	
PE10.6	Explain the Adolescent Nutrition and common nutritional problems	K	KH	Y	LGT, SGT	Written/ Vivavoce	
Topic 11: Obesity in children				Number of competencies: (04)		Number of competencies that require certification: (01)	
PE11.1	Describe the etiology, clinical features and management of obesity in children	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE11.2	Describe the risk approach for obesity and discuss the prevention strategies	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE11.3	Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall	S	SH	Y	Bedside clinics, Standardized patients	Document in log book	

PE11.4	Examination including calculation of BMI, measurement of waist-hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc	S	SH	Y	Bedside clinics, Standardizedpatients, Videos	SkillsStation	
Topic 12: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)		Number of competencies: (08)			Number of competencies that require certification: (NIL)		
PE12.1	Describe the RDA, dietary sources of Vitamin A, its metabolism.	K	K	Y	LGT,SGT	Written/Vivavoce	
PE12.2	Describe the causes, clinical features, classification, diagnosis and management of Deficiency/excess of Vitamin A	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE12.3	Describe the causes, clinical features, diagnosis and management of Deficiency/excess of Vitamin D (Rickets and Hypervitaminosis D)	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE12.4	Describe the causes, clinical features, diagnosis and management of deficiencyof Vitamin E	K	KH	N	LGT,SGT	Written/Vivavoce	
PE12.5	Describe the RDA, dietary sources of Vitamin K and their role in health and disease	K	K	N	LGT,SGT	Written/Vivavoce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE12.6	Describe the causes, clinical features, diagnosis, management and prevention of deficiency of Vitamin K	K	KH	N	LGT,SGT	Written/Viva voce	
PE12.7	Describe the causes, clinical features, diagnosis and management of deficiency of B complex Vitamins	K	KH	Y	LGT,SGT	Written/Viva voce	
PE12.8	Describe the RDA, dietary sources of Vitamin C and their role in Health and disease, clinical features of deficiency and management	K	KH	N	LGT,SGT	Written/Viva voce	
Topic 13: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium		Number of competencies: (04)			Number of competencies that require certification: (NIL)		
PE13.1	Describe the RDA, dietary sources of Iron and their role in health and disease, clinical features of iron deficiency, and management	K	K	Y	LGT,SGT	Written/Viva voce	
PE13.2	Describe the National anaemia control program and its recommendations	K	K	Y	LGT,SGT	Written/Viva voce	

PE13.3	Describe the RDA, dietary sources of Iodine and their role in Health and disease, deficiency, and Goiter control program	K	K	Y	LGT,SGT	Written/Viva voce	
PE13.4	Describe the RDA, dietary sources of Calcium and Magnesium and their role in health and disease, clinical features and management of deficiency states.	K	K	Y	LGT,SGT	Written/Viva voce	
Topic 14: Poisoning		Number of competencies: (03)			Number of competencies that require certification (NIL)		
PE14.1	Explain the risk factors, clinical features, diagnosis and management of Kerosene ingestion	K	KH	N	LGT,SGT	Written/Viva voce	
PE14.2	Explain the risk factors, clinical features, diagnosis and management of Organophosphorus poisoning	K	KH	N	LGT,SGT	Written/Viva voce	
PE14.3	Describe the risk factors, clinical features, diagnosis and management of paracetamol poisoning	K	KH	N	LGT,SGT	Written/Vivavoce	
Topic 15: Fluid and electrolyte balance		Number of competencies:(04)			Number of competencies that require certification:(NIL)		
PE15.1	Describe the fluid and electrolyte requirement in health and disease	K	KH	Y	LGT,SGT	Written/Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE15.2	Interpret electrolyte report and describe the management of sodium and potassium imbalance	S	SH	Y	Bedside clinics,SGT	Skill assessment	
PE15.3	Demonstrate the steps of inserting an IV cannula in a model	S	SH	Y	Skills Lab	mannequin	
PE15.4	Demonstrate the steps of inserting an interosseous line in a mannequin	S	SH	Y	Skills Lab	mannequin	
Topic 16: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline		Number of competencies:(06)			Number of competencies that require certification: (NIL)		
PE16.1	Explain the components of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines and method of Risk stratification	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE16.2	Assess children<2months using IMNCI Guidelines	S	SH	Y	DOAP	Document in log Book	
PE16.3	Assess children 2 months to 5 years using IMNCI guidelines and Stratify Risk	S	SH	Y	DOAP	Document in log Book	

PE16.4	Identify children with undernutrition as per IMNCI criteria and plan referral	S	SH	Y	DOAP	Document in log book	
PE16.5	Identify and stratify risk in a sick neonate using IMNCI guidelines	S	SH	Y	DOAP	Document in Log Book	
PE16.6	Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer	S	SH	Y	Bedside clinics, Skillslab	Document in Log book	

Topic 17: The National Health programs, NHM	Number of competencies:(01)	Number of competencies that require certification: (NIL)
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PE17.1	Describe the vision and outline the goals, strategies and plan of action of NHM and other important national programs pertaining to maternal and child health including RCH, RMNCH A+, RBSK, RSK, JSSK mission Indradhanush and ICDS	K	KH	Y	LGT,SGT	Written/Viva voce	
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Topic 18: National Programs, RCH - Universal Immunizations program	Number of competencies: (14)	Number of competencies that require certification: (01)
PE18.1	Explain the components of the Universal Immunization Program and the National Immunization Program	K KH Y LGT,SGT Written/Vivavoce
PE18.2	Explain the epidemiology of Vaccine preventable diseases	K KH Y LGT,SGT Written/Vivavoce

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE18.3	Describe Vaccine with regards to classification of vaccines, strain used, dose, route, schedule, risks, benefits and side effects, indications and Contraindications	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.4	Define cold-chain and discuss the methods of safe storage and handling of vaccines	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.5	Describe immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, travelers	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.6	Assess patient for fitness for immunization and prescribe an age-appropriate immunization schedule	S	P	Y	Out Patient clinics Skills lab	Skill assessment	5

PE18.7	Educate and counsel apparent for immunization	A/C	SH	Y	DOAP	Document in Log Book	
PE18.8	Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and Medico-legal implications	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE18.9	Observe the handling and storing of vaccines	S	SH	Y	DOAP	Written/Vivavoce	
PE18.10	Document Immunization in an immunization record	S	SH	Y	Out Patient clinics, Skills lab	Skill assessment	
PE18.11	Observe the administration of UIP vaccines	S	SH	Y	DOAP	Document in Log Book	
PE18.12	Demonstrate the correct administration of different vaccines in a mannequin	S	SH	Y	DOAP	Document in Log Book	
PE18.13	Explain the term implied consent in Immunization services	K	K	Y	SGT	Written/Viva voce	
PE18.14	Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, Hepatitis A, Influenza, COVID, typhoid, IPV & HPV	K	K	N	LGT, SGT	Written/Viva voce	

Topic 19: Care of the Normal New born, and High risk New born

Number of competencies: (17)

Number of competencies that require certification: (NIL)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE19.1	Define the common neonatal nomenclatures including the classification new born and describe the characteristics of a Normal Term Neonate and High-Risk Neonates, Explain the care of a normal neonate	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.2	Perform Neonatal resuscitation on a manikin	S	SH	Y	DOAP	Log book entry of Performance	
PE19.3	Assessment of a normal neonate. Explain the follow up care for neonates including Breast Feeding, Temperature maintenance, immunization, importance of growth monitoring and red flags	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE19.4	Describe the etiology, clinical features and management of Birth asphyxia	K	KH	Y	LGT,SGT	Written/Viva voce	

PE19.5	Describe the etiology, clinical features and management of Respiratory distress in New-born including meconium aspiration and transient tachypnoea of newborn	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.6	Explain the etiology, clinical features and management of Birth injuries	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.7	Explain the etiology, clinical features and management of Hemorrhagic disease of Newborn	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.8	Describe the clinical characteristics, complications and management of Low birth weight (preterm and Small for gestation)	K	KH	Y	LGT,SGT	Written/Vivavoce	
PE19.9	Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.10	Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypoglycemia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.11	Explain the etiology, clinical features and management of Neonatal hypocalcemia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.12	Describe the etiology, clinical features and management of Neonatal seizures	K	KH	Y	LGT,SGT	Written/Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE19.13	Explain the etiology, clinical features and management of Neonatal Sepsis	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.14	Describe the etiology, clinical features and management of Perinatal infections	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.15	Describe the etiology, clinical features and management of Neonatal hyperbilirubinemia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.16	Identify clinical presentations of common surgical conditions in the newborn including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen	K	KH	Y	LGT,SGT	Written/Viva voce	

PE19.17	Describe the riskfactors, clinical features, diagnosis and management of Oxygen toxicity	K	KH	N	LGT, SGT	Written/ Viva voce	
Topic 20: Genito-Urinary system		Number of competencies (09)			Number of competencies that require certification: (NIL)		
PE20.1	Enumerate the etio-pathogenesis, clinical features, complications and management of Urinary Tract infection in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.2	Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Post-Streptococcal Glomerulonephritis in Children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.3	Describe the approach and referral criteria to a child with Proteinuria	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.4	Describe the approach and referral criteria to a child with Hematuria	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.5	Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Renal Failure in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.6	Enumerate the etio-pathogenesis, clinical features, complications and management of Chronic Renal Failure in Children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.7	Enumerate the etio-pathogenesis, clinical features, complications and management of Wilms Tumor	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.8	Perform and interpret the common analytes in a Urine examination	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE20.9	Interpret report of Plain XRay of KUB	S	SH	Y	Bedside clinics, Skills lab	Log book	
Topic 21: Approach to and recognition of a child with possible Rheumatologic problem		Number of competencies: (050)			Number of competencies that require certification:(NIL)		
PE21.1	Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem	K	KH	Y	LGT,SGT	Written/Viva voce	
PE21.2	Describe the etiopathogenesis, diagnosis and management of Henoch Schoenlein Purpura.	K	K	N	LGT,SGT	Written/Viva voce	

PE21.3	Describe the etiopathogenesis, diagnosis and management of Kawasaki Disease	K	K	N	LGT,SGT	Written/Viva voce	
PE21.4	Describe the etiopathogenesis, diagnosis and management of SLE	K	K	N	LGT,SGT	Written/Viva voce	
PE21.5	Describe the etiopathogenesis, diagnosis and management of JIA	K	K	N	LGT,SGT	Written/Viva voce	

Topic 22: Cardiovascular system- Heart Diseases **Number of competencies: (11)** **Number of competencies that require certification:(NIL)**

PE22.1	Describe the Hemodynamic changes, clinical presentation, complications and management of Acyanotic Heart Diseases	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.2	Describe the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.3	Explain the etio-pathogenesis, clinical presentation and management of cardiac failure in infant and children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.4	Explain the etio-pathogenesis, clinical presentation and management of Acute Rheumatic Fever in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.5	Describe the etio-pathogenesis, clinical features and management of Infective endocarditis in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.6	Describe the etiopathogenesis, grading, clinical features and management of hypertension in children	K	KH	Y	LGT,SGT	Short notes	
PE22.7	Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE22.8	Perform independently examination of the cardiovascular system– look for precordial bulge, pulsations in the precordium, JVP and its significance in children and infants, relevance of percussion in Pediatric examination, Auscultation and other system examination and document	S	SH	Y	Bedside clinics, Skills lab	Skill station	
PE22.9	Interpret a chest X-ray and recognize cardiomegaly	S	SH	Y	Bedside clinics, Skills lab	Log book entry	
PE22.10	Interpret Pediatric ECG	S	SH	Y	Bedside clinics, Skills lab	Log book entry	

PE22.11	Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter	A	SH	Y	SGT	Document in Log Book	
Topic 23: GIT and Hepatobiliary system		Number of competencies: (21)			Number of competencies that require certification:(02)		
PE 23.1	Define vomiting, discuss causes, evaluation & management of vomiting in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.2	Define constipation discuss causes, evaluation & management of constipation in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.3	Discuss the causes, evaluation and management of abdominal pain in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.4	Define diarrhea (acute diarrhea, chronic diarrhea, persistent diarrhea). Discuss etiology, risk factors, clinical features, complications, investigations and treatment (according to WHO guidelines) of acute gastroenteritis.	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.5	Discuss the causes, clinical presentation and management of dysentery in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.6	Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS. Discuss composition of fluids used in management of diarrhea. Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE23.7	Elicit history pertaining to diarrheal diseases. Assess for signs & symptoms of dehydration, shock, prerenal AKI, electrolyte disturbances, document and present.	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE23.8	Perform and interpret stool examination including Hanging Drop, Interpret RFT and electrolyte report In the context of diarrhea	S	SH	N	Bedside clinics, Skills	lab Log book	
PE23.9	Perform NG tube insertion in a manikin	S	P	Y	DOAP	Document in Log book	

PE23.10	Perform IV cannulation in a model	S	P	Y	DOAP	Document in Log book	
PE23.11	Perform Interosseous insertion model	S	P	Y	DOAP	Document in Log book	2
PE23.12	Discuss the etio-pathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease	K	KH	N	LGT, SGT	Written/ Viva voce	2
PE23.13	Discuss the etio-pathogenesis, clinical features and management of acute hepatitis in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.14	Discuss the etio-pathogenesis, clinical features and management of Fulminant Hepatic Failure in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.15	Discuss the etio-pathogenesis, clinical features and management of chronic liver diseases in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.16	Discuss the etio-pathogenesis, clinical features and management of Portal Hypertension in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.17	Elicit, document and present the history related to diseases of Gastrointestinal system	S	SH	Y	Bedside clinics,Skills lab	Skills Station	
PE23.18	Identify external markers for GI and Liver disorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma, Palmar erythema, Ichthyosis, Caput medusa, Clubbing, failing to thrive, Vitamin A and D deficiency	S	SH	Y	Bedside clinics,Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE23.19	Perform examination of the abdomen, demonstrate organomegaly, ascites etc.	S	SH	Y	Bedside clinics,Skills lab	Skill assessment	
PE23.20	Interpret Liver Function Tests, viral markers, ultra-sonogram report	S	SH	Y	Bedside clinics,Skills lab	Skill assessment	
PE23.21	Enumerate the indications for Upper GI endoscopy	K	K	N	SGT	Viva voce	
Topic: 24 Pediatric Emergencies – Common Pediatric Emergencies		Number of competencies: (23)			Number of competencies that require certification:(10)		
PE24.1	Describe the etio-pathogenesis, clinical approach and management of cardio-respiratory arrest in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE24.2	Describe the etio-pathogenesis and management of respiratory distress in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.3	Describe the etio-pathogenesis, clinical approach and management of Shock in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.4	Describe the etio-pathogenesis, clinical approach and management of Status epilepticus	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.5	Describe the etio-pathogenesis, clinical approach and management of an unconscious child	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.6	Explain oxygen therapy, in Pediatric emergencies and modes of administration	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.7	Observe the various methods of administering Oxygen	S	KH	Y	Demonstration	Document in log book	
PE24.8	Assess airway and breathing: recognise signs of severe respiratory distress. Check for cyanosis, severe chest in drawing, Grunting	S	P	Y	DOAP, Skills lab	Skills Assessment	3
PE24.9	Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a Simulated environment	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.10	Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate	S	P	Y	DOAP, Skills Lab	Skills Assessment	3

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE24.11	Assess airway and breathing perform assisted ventilation by Bag and mask in a simulated environment	S	P	Y	DOAP, Skills lab	Skills Assessment	3
PE24.12	Check for signs of shock i.e. pulse, Blood pressure, CRT	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.13	Secure an IV access in a simulated environment	S	P	Y	DOAP, Skills Lab	Skills Assessment	3

PE24.14	Choose the type offluidand calculate the fluid requirement in shock	S	P	Y	DOAP, SGTask	Skills Assessment	3
PE24.15	Assess level of consciousness & provide emergency treatment to a child with convulsions/coma position an unconscious child. Position a child with suspected trauma. Administer IV/per rectal Diazepam for a convulsing child in a simulated environment.	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.16	Assess for signs of severe dehydration	S	P	Y	Bedside clinics, Skills lab	Skill station	3
PE24.17	Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.18	Describe the advantages and correct method of keeping an infant warm by skin- to- skin contact	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.19	Describe the environmental measures to maintain temperature	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.20	Assess for hypothermia and maintain temperature	S	SH	Y	SkillsLab	Skills Assessment	
PE24.21	Provide BLS for children in manikin	S	P	Y	SkillsLab	Skills Assessment	3
PE24.22	Counsel parents of dangerously ill/ terminally ill child to break a bad news	S	SH	Y	DOAP	Document in Log book	
PE24.23	Obtain Informed Consent	S	SH	Y	DOAP	Document in Log book	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
Topic 25: Respiratory system		Number of competencies: (06)		Number of competencies that require certification: (NIL)			
PE25.1	Describe the etio-pathogenesis, clinical features and management of Acute Otitis Media (AOM)	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.2	Describe the etio-pathogenesis, clinical features and management of Epiglottitis	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE25.3	Explain the etio-pathogenesis, clinical features and management of Acute laryngo- tracheo-bronchitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.4	Describe the etiology, clinical features and management of Stridor in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.5	Describe the types, clinical presentation, and management of foreign body aspiration in infants and children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.6	Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema	S	SH	Y	Bedside clinics, SGT,LGT	Skill assessment /Written /Viva voce	

Topic 26: Anemia and other Hemato-oncologic disorders in children Number of competencies: (17). Number of competencies that require certification: (NIL)

PE26.1	Explain the etio-pathogenesis, clinical features, classification and approach to a child with anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.2	Describe the etio-pathogenesis, clinical features and management of Iron Deficiency anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.3	Describe the etiopathogenesis, clinical features and management of VITB12, Folate deficiency anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.4	Explain the etio-pathogenesis, clinical features and management of Hemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis, Auto-immune hemolytic	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
	anaemia and hemolytic uremic syndrome						
PE26.5	Describe the National Anaemia Control Program	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE26.6	Describe the cause of thrombocytopenia in children: describe the clinical features and management of Idiopathic Thrombocytopenic Purpura(ITP)	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.7	Explain the etiology, classification, pathogenesis and clinical features of Hemophilia in children	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.8	Explain the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in children	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.9	Explain the etiology, clinical presentation and management of lymphoma in children	K	KH	N	LGT, SGT	Written/ Vivavoce	
PE26.10	Perform examination of the abdomen, demonstrate organomegaly	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE26.11	Interpret CBC, LFT	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE26.12	Perform and interpret peripheral smear	S	SH	Y	DOAP	Document in log book	
PE26.13	Explain the indications for Hemoglobin electrophoresis and interpret report	K	K	N	SGT	Viva voce	
PE26.14	Demonstrate, performance of bone marrow aspiration in manikin	S	SH	Y	Skills lab	Document in log Book	
PE26.15	Enumerate the referral criteria for Hematological conditions	S	SH	Y	Bedside clinics, SGT	Viva voce	
PE26.16	Counsel and educate patients about prevention and treatment of anemia	A/C	SH	Y	Bedside clinics, Skills lab	Document in log book	
PE26.17	Enumerate the indications for splenectomy and precautions	K	K	N	SGT Activity	Viva voce	
Topic 27: Systemic Pediatrics-Central Nervous system		Number of competencies: (14)		Number of competencies that require certification:(NIL)			

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE27.1	Explain the etio-pathogenesis, clinical features, complications, management, and prevention of acute bacterial Meningitis in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE27.2	Describe the etio-pathogenesis, clinical features, complications, management and prevention of tuberculous meningitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.3	Distinguish bacterial, viral and tuberculous meningitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.4	Explain the etio-pathogenesis, classification, clinical features, complication and management of Hydrocephalus in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.5	Explain the etio-pathogenesis, clinical features, and management of Infantile hemiplegia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.6	Explain the etio-pathogenesis, clinical features, complications and management of Febrile seizures in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.7	Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.8	Define status Epilepticus. Discuss the clinical presentation and management	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.9	Describe the etio-pathogenesis, clinical features and management of Mental retardation in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.10	Describe the etio-pathogenesis, clinical features and management of children with cerebral palsy	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.11	Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.12	Explain the etio-pathogenesis, clinical features and management of Duchene muscular dystrophy	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE27.13	Interpret and explain the findings in a CSF analysis	S	SH	Y	SGT	Logbook	

PE27.14	Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
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Topic 28: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma Number of competencies: (05) Number of competencies that require certification: (NIL)

PE28.1	Describe the etio-pathogenesis, clinical signs, management and prevention of Allergic Rhinitis in Children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE28.2	Explain the etio-pathogenesis, clinical types, presentations, management and prevention of childhood Asthma	K	KH	Y		Written/ Viva voce	
PE28.3	Develop a treatment plan for Asthma appropriate to clinical presentation & severity	S	SH	Y		Skill assessment	
PE28.4	Enumerate the indications for PFT	K	K	N		Viva voce	
PE28.5	Observe administration of Nebulization	S	SH	Y		Document in log book	

Topic 29: Chromosomal Abnormalities Number of competencies: (05) Number of competencies that require certification: (NIL)

PE29.1	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Down Syndrome.	K	KH	Y		Written/ Viva voce	
PE29.2	Interpret normal Karyotype and recognize Trisomy 21	S	SH	Y	Bedside clinics, Skills lab	Log book	
PE29.3	Counsel parents regarding -1. Present child, 2. Risk in the next pregnancy	A/C	SH	N	Bedside clinics, Skills lab	Log book	
PE29.4	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Turner's Syndrome	K	KH	N	LGT, SGT	Written/ Viva voce	
PE29.5	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
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Topic 30: Endocrinology		Number of competencies: (07)		Number of competencies that require certification: (01)				
PE30.1	Describe the etiology (congenital & acquired), clinical features, management of Hypothyroidism in children	K	KH	Y	LGT, SGT	Written/ Viva voce		
PE30.2	Interpret and explain neonatal thyroid screening report	S	SH	Y	Bedside clinics, SGT	Skill assessment		
PE30.3	Describe the etiology, clinical types, clinical features, diagnostic criteria, complications and management of Diabetes mellitus in children	K	KH	Y	LGT, SGTs	Written/ Viva voce		
PE30.4	Recognize clinical features DKA, Perform and interpret Urine Dip Stick for Sugar & Ketone bodies & refer	S	P	Y	DOAP	Skill assessment	3	
PE30.5	Perform genital examination and recognize Ambiguous Genitalia, counsel and refer	S	SH	Y	Bedside clinicSkills lab	Skill assessment		
PE30.6	Define precocious and delayed Puberty, Perform Sexual Maturity Rating (SMR), Recognize precocious and delayed Puberty and refer	K, S	KH	Y	LGT, SGT	Written/ Viva voce		
PE30.7	Identify deviations in growth and plan appropriate referral	S	P	Y	Bedside clinics,Skills Lab	Skill assessment		
Topic 31: Vaccine preventable Diseases – Tuberculosis		Number of competencies: (14)		Number of competencies that require certification: (NIL)				
PE31.1	Describe the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents	K	KH	Y	LGT, SGT	Written/ Viva voce		
PE31.2	Describe the various diagnostic tools for childhood tuberculosis	K	KH	Y	LGT, SGT	Written/ Viva voce		
PE31.3	Describe the various regimens for management of Tuberculosis as per National Guidelines	K	KH	Y	LGT, SGT	Written/ Viva voce		
PE31.4	Describe the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Control Program	K	KH	Y	LGT, SGT	Written/ Viva voce		
PE31.5	Elicit, document and present history of contact with tuberculosis in every patient encounter, Identify BCG scar and interpret a Mantoux test.	S	SH	Y	Bedside clinics, Skilllab	Skill assessment		
PE31.6	Interpret blood tests in the context of laboratory evidence for tuberculosis	S	SH	N	Bedside clinics, SGT	Log book		

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/ SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE31.7	Describe the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC	K	KH	Y	Bedside clinics, SGT	Written/ Viva voce	
PE31.8	Enumerate the indications, discuss the limitations of methods of culturing M. Tuberculosis and the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications	K	KH	Y	SGT	Written/ Viva voce	
PE31.9	Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of fever in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.10	Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Mumps, Rubella & Chicken pox	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.11	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus.	K	KH	Y	LGT, SGT	Written/ Vivavoce	
PE31.12	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid	K	KH	Y	LGT, SGT	Written/ Vivavoce	
PE31.13	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vectorborne diseases	K	KH	Y	LGT, SGT	Written/ Vivavoce	
PE31.14	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of children with Common Parasitic infections, malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis, giardiasis	K	KH	Y	LGT, SGT	Written/ Vivavoce	
Topic 32: The role of the physician in the community		Number of competencies: (01)		Number of competencies that require certification : (NIL)			
PE32.1	Identify, Describe and Defend medicolegal, socio-cultural and ethical issues as they pertain to health care in children (including Parental rights and right to refuse treatment)	K	KH	Y	SGT	Written/ Viva voce	

PSYCHIATRY (CODE: PS)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
PSYCHIATRY (Topics=13, Competencies=17)							
Topic 1: Introduction to Psychiatry		Number of competencies:03			Number of competencies that require certification : (NIL)		
PS 1.1	Describe the classification of psychiatric disorders and its basis (neurotic vs psychotic; organic vs non-organic/functional)	K	KH	N	LGT/SDL	Written/ Tutorial	
PS1.2	Elicit history in patient presenting with psychiatric disorder(s)	S	SH	Y	Bedside clinic, DOAP session	Direct Observation	
PS1.3	Perform mental status examination (MSE) in patients presenting with psychiatric disorder(s)	S	SH	Y	Bedside clinic, DOAP session	Direct Observation	
Topic 2: Organic Psychiatric Disorders		Number of competencies:01			Number of competencies that require certification : (NIL)		
PS 2.1*	Describe common Organic Psychiatric Disorders with emphasis on Delirium & Dementia	K	KH	Y	LGT/Flipped classroom	Written, Tutorial	
Topic 3: Psychoactive Substance Use Disorders and other addiction disorders		Number of competencies: 01			Number of competencies that require certification : (NIL)		
PS 3.1	Describe and identify clinical presentation of abuse of alcohol, nicotine and other psychoactive substances prevalent in your area and their management.	S, K	SH, KH	Y	Bedside clinic, DOAP	Direct observation, OSCE	
Topic 4: Schizophrenia and other Psychotic disorders		Number of competencies: 01			Number of competencies that require certification : (NIL)		
PS 4.1	Diagnose and manage a case of Schizophrenia at primary care level	S,K	KH	Y	Bedside teaching	Direct observation, OSCE	
Topic 5: Depressive disorders		Number of competencies: 02			Number of competencies that require certification : 1		
PS 5.1	Diagnose and manage case of depression at primary care level	S	SH	Y	Bedside teaching, role-play, DOAP	OSCE, Checklist based Skill assessment	1

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
PS 5.2	Identify red flag signs of depression and refer to a specialist	S	KH/ SH	Y	Role play, Cine-education	Checklist based Skill assessment	
Topic 6: Bipolar disorders Number of competencies: 01 Number of competencies that require certification : (NIL)							
PS 6.1	Diagnose and manage an episode of Mania at primary care level	S	SH	N	Bedside teaching	Short answer, viva-voce	
Topic 7: Anxiety Disorders (including OCD) Number of competencies: 01 Number of competencies that require certification : (NIL)							
PS 7.1	Diagnose and manage anxiety disorders at primary care level	S	SH	Y	Bedside teaching, role-play, DOAP	OSCE, Checklist based Skill assessment	
Topic 8: Stress related disorders Number of competencies:01 Number of competencies that require certification : (NIL)							
PS8.1	Diagnose stress related disorders (Acute Stress Disorder and Adjustment Disorders) and make appropriate referral	K	SH	Y	Bedside clinic, Role play	Skill assessment	
Topic 9: Psychosexual and Gender Identity Disorders Number of competencies:02 Number of competencies that require certification : (NIL)							
PS 9.1	Describe common psychosexual disorders	K	K	N	LGT	MCQ, Written, Viva voce	
PS9.2	Demonstrate knowledge of medico-legal, societal, ethical and humanitarian principles on dealing with LGBTQA+ community.	K	K	Y	LGT/SDL	MCQ, Written Viva voce	
Topic 10: Psychiatric Disorders in Childhood and Adolescence Number of competencies:01 Number of competencies that require certification : (NIL)							
PS 10.1	Classify and describe disorders commonly seen in childhood and adolescence with emphasis on ADHD and Autism Spectrum Disorders	K	KH	Y	LGT	MCQ, Written Viva voce	
Topic 11: Intellectual Disability Disorder Number of competencies: 01 Number of competencies that require certification : (NIL)							
PS11.1	Describe Intellectual Disability Disorder	K	KH	Y	LGT	MCQ, Written Viva voce	
Topic 12: Psychiatric Emergencies Number of Competencies: 01 Number of competencies that require certification : 1							

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
PS12.1	Perform suicide risk assessment	S	SH	Y	Role play, bedside teaching	Skill assessment	01
Topic 13: Therapeutics		Number of Competencies: 01			Number of competencies that require certification : (NIL)		
PS 13.1	Describe the process of modified ECT and identify misconceptions associated with ECT	K	KH	Y	SGT observation & discussion, Video	Written/ Viva voce	

DERMATOLOGY, VENEREOLOGY & LEPROSY (CODE: DR)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
DERMATOLOGY, VENEREOLOGY & LEPROSY (Topics=15,Competencies=48)							
Topic 1: Acne Number of competencies: (02)		Number of competencies that require certification: (NIL)					
DR1.1	Recognize a patient with acne vulgaris including the risk factors, etiology and clinical grading	K/S/A	KH/SH	Y	LGT, SGT , Bed side teaching, Demonstration	Written, Tutorials, Direct Observation, OSCE	
DR1.2	Device a management plan of a patient with acne	K	KH	Y	LGT, SGT, Bed side teaching	Written, Tutorials, Direct Observation, OSCE, Prescription writing	
Topic 2: Vitiligo Number of competencies: (01)		Number of competencies that require certification: (NIL)					
DR 2.1	Identify and differentiate vitiligo from other causes of hypo pigmented lesions and present a treatment plan	K/S	KH/SH	Y	SGT, Bedside teaching, Demonstration	Written, OSCE, Picture based MCQs	
Topic 3: Papulosquamous disorders Number of competencies:(03)		Number of competencies that require certification: (NIL)					
DR 3.1	Identify and distinguish psoriatic lesions from other causes	K/S	KH/SH	Y	SGT, Bedside teaching, Demonstration	Written, OSCE, Picture based MCQs	
DR3.2	Demonstrate the Grattage test	S	SH	Y	Bedside teaching, Demonstration, DOAP	Direct Observation, OSCE	
DR3.3	Devise a treatment plan for a patient with psoriasis and counsel the patient regarding various treatment options and chronicity of disease	K/S/A/C	SH	Y	SGT, Bedside teaching, Role Play	Mini CEX, Case Based Discussion, OSCE	
Topic 4: Lichen Planus Number of competencies:(01)		Number of competencies that require certification: (NIL)					
DR 4.1	Identify and manage a case of lichen planus	K/S	KH/SH	Y	SGT, Bedside teaching,	Written, OSCE,	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
					Demonstration	Picture based MCQs	
Topic 5: Scabies Number of competencies:(01) Number of competencies that require certification: (NIL)							
DR5.1	Devise a treatment plan for management of scabies including adverse drug reactions	K	KH	Y	SGT, Bedside teaching	Written, Case Based Discussion, OSCE	
Topic 6: Pediculosis Number of competencies:(01) Number of competencies that require certification: (NIL)							
DR 6.1	Describe the pathogenesis, diagnostic features and management of pediculosis in adults and children	K	KH	Y	LGT, SGT, Seminar, Flipped Classroom	Written, Tutorials	
Topic 7: Fungal Infections Number of competencies:(02) Number of competencies that require certification: (NIL)							
DR7.1	Demonstrate candida/dermatophytes in fungal scrapings on KOH mount	S	SH	Y	Bedside teaching, DOAP	DOPS, OSCE	
DR7.2	Manage a case of fungal infections	K	KH	Y	LGT, SGT	Written, Case based discussion	
Topic 8: Common Viral Infections Number of competencies:(05) Number of competencies that require certification: (NIL)							
DR8.1	Describe the aetiology, microbiology, pathogenesis, clinical presentations and management of common viral infections of the skin in adults and children	K	KH	Y	LGT, SGT, Bed side teaching, Self-Directed Learning (SDL)	Written, Tutorials, Direct Observation	
DR8.2	Identify and distinguish herpes simplex and herpes labialis from other skin lesions	K/S	KH/SH	Y	SGT, Bedside teaching, Demonstration	Written, OSCE, Picture based MCQs	
DR8.3	Identify and distinguish herpes zoster and varicella from other skin lesions	K/S	KH/SH	Y	SGT, Bedside teaching, Demonstration	Written, OSCE, Picture based MCQs	
DR8.4	Identify and distinguish viral warts from other skin lesions	K/S	KH/SH	Y	SGT, Bedside teaching, Demonstration	Written, OSCE, Picture based MCQs	
DR8.5	Identify and distinguish molluscum contagiosum from other skin	K/S	KH/SH	Y	SGT, Bedside teaching,	Written, OSCE,	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
	lesions				Demonstration	Picture based, MCQs	
Topic 9: Leprosy Number of competencies:(06) Number of competencies that require certification: (1)							
DR9.1	Describe the epidemiology, clinical features and classification of Leprosy	K	KH	Y	LGT, SGT, Seminar, Flipped Classroom	Written, Tutorials	
DR9.2	Demonstrate an appropriate neurologic examination in Leprosy	S	SH	Y	Bedside teaching, DOAP	DOPS, OSCE	2
DR9.3	Enumerate the indications and observe the performance of a slit skin smear in patients with leprosy	K	KH	Y	SGT, Bedside teaching	Written, Tutorials	
DR9.4	Effectively treat a case of Lepra Reaction	K/S/A/C	KH/SH	Y	LGT, SGT, Bed Side teaching	Case Based Discussion, Prescription Writing, Direct Observation	
DR9.5	Effectively manage a case of Leprosy based on National Guidelines and WHO Guidelines	K/S/C	KH/SH	Y	LGT, SGT, Bed Side teaching, SDL	Written, Case Based Discussion, Direct Observation, Prescription Writing	
DR9.6	Effectively manage complications of Leprosy and counsel regarding disability and stigma	K/S/A/C	KH/SH	Y	LGT, SGT, Bed Side teaching, Simulations	Written, Case Based Discussion, OSCE	
Topic 10: Sexually Transmitted Diseases Number of competencies:(11) Number of competencies that require certification: (NIL)							
DR10.1	Understand the rationale and Effectively use Syndromic case management for patients presenting with sexually transmitted diseases	K	KH	Y	SGT, Bedside teaching	Written, Tutorials, OSCE	
DR10.2	Describe the clinical features, stages, and appropriate use of diagnostic tests for diagnosis of Syphilis	K	KH	Y	LGT, SGT, Bedside teaching	Written, Tutorials, OSCE	
DR10.3	Describe the clinical features, stages, and appropriate use of diagnostic tests for diagnosis of non-syphilitic genital ulcer namely chancroid and herpes genitalis	K	KH	Y	LGT, SGT, Bedside teaching Clinic, SDL	Written, Tutorials, OSCE	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
DR10.4	Conduct a proper examination in a patient with GUD ensuring privacy, confidentiality in presence of chaperone	S/C	SH	Y	Bedside teaching, DOAP	Written, Tutorials, Direct observation, Case based discussion	
DR10.5	Effectively take sexual history and provide patient education on safe sexual behaviours including pretest counselling for HIV	C	SH	Y	Role play, Simulations	OSCE, Rating scale, Direct observation and feedback	
DR10.6	Effectively manage syphilis and genital ulcer disease based on clinical features and serological tests including in pregnancy and neonates and advise as per syndromic case management	K/S/A/C	SH	Y	SGT, Bedside teaching, Role Play	Case Based Discussion, OSCE, Prescription writing	
DR10.7	Recognize a patient with LGV and Donovanosis based on clinical findings and provide appropriate therapy using syndromic case management	K/S	KH/SH	Y	LGT, SGT, Bedside teaching	Written, OSCE, Direct Observation, Picture based MCQs, Prescription writing	
DR10.8	Describe the etiology, diagnostic and clinical features and management of gonococcal and non-gonococcal urethritis	K	KH	Y	LGT, SGT, Flipped Classroom, SDL	Written, Tutorials	
DR10.9	Effectively manage a patient with urethral discharge and counsel regarding prevention as per syndrome case management guidelines	K/S/A/C	SH	Y	SGT, Bedside teaching, Role Play	Case Based Discussion, OSCE, Prescription writing	
DR10.10	Diagnose and manage a patient presenting with vaginal discharge as per syndrome case management guidelines	K/S/C	SH	Y	SGT, Bedside teaching	Written, Case Based Discussion, OSCE	
DR 10.11	Diagnose and treat a patient with genital warts and provide patient education	K/S/A/C	SH	Y	LGT, Bedside teaching, Simulations	Written, OSCE, Case based discussion	

Topic 11:HIV Number of competencies:(02)

Number of competencies that require certification: (NIL)

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
DR11.1	Diagnose and manage common dermatologic manifestations of HIV including opportunistic infections(OI) based on clinical features and appropriate lab tests	K, S	KH	Y	LGT, Bedside teaching, SDL	Written, Tutorials, Case based discussion, Written, OSCE, Direct Observation, Picture based MCQs	
DR11.2	Recognize common dermatological manifestations of ART drugs and initiate primary management appropriately	K, C	KH	Y	LGT, SGT, Bedside teaching, Flipped Classroom	Written, Tutorials, OSCE, Written, OSCE, Direct Observation, Picture based MCQs	
Topic 12 : Eczemas, Erythroderma and cutaneous adverse drug reactions Number of competencies:(5)						Number of competencies that require certification: (NIL)	
DR12.1	Identify common types of eczema (both endogenous and exogenous based on clinical features and history	K/S	KH/SH	Y	LGT, SGT, Bedside teaching, Flipped Classroom	Written, Case Based Discussion, OSCE, Picture based MCQs	
DR12.2	Provide basic management for common eczemas including topical and systemic therapy	K/S	KH/SH	Y	SGT, Bedside teaching, SDL	Written, Case Based Discussion, OSCE, Prescription writing	
DR12.3	Diagnose Erythroderma, including medical complications and provide appropriate primary care to stabilize a patient before referral	K,S	KH/SH	Y	SGT, Bedside teaching, SDL	Written, Tutorials, Case based discussion	
DR12.4	Distinguish adverse drug reactions like Fixed drug eruption, Drug Hypersensitivity syndrome and Steven Johnson syndrome/ Toxic epidermal necrolysis from other skin conditions	K/S	KH/SH	Y	LGT, Bedside teaching, Demonstrations, SDL	Written, Tutorials, Case based discussion, OSCE	
DR12.5	Provide primary care in patients with Adverse drug reactions	K/S/A/C	KH/SH	Y	SGT, Bedside teaching, Video LGTs	Written, Viva Voce, Case based discussion	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
Topic 13:Vesiculo- bullous Lesions Number of competencies:(02) Number of competencies that require certification: (NIL)							
DR13.1	Diagnose common auto Immune vesiculo- bullous disorders like pemphigus and bullous pemphigoid based on clinical features and appropriate use of Nikolsky's sign and Bulla spread sign	K/S	KH/SH	Y	LGT, SGT, Bedside teaching, Demonstration	Written, Tutorials , Case based discussion, OSCE, Direct Observation, Picture based MCQs	
DR 13.2	Provide primary management for a patient with vesiculo-bullous disorder before referral	K/S/A/C	KH/SH	Y	Bedside teaching, SGT	Written, Tutorials, Case Based Discussion, Prescription writing	
Topic 14 : Urticaria Angioedema Number of competencies: (03) Number of competencies that require certification : (01)							
DR14.1	Classify urticaria and angioedema and describe etio-pathogenesis, clinical features and precipitating factors	K	KH	Y	LGT,SGT, Symposium	Written (Short notes, part of structured essay), Tutorials, Problem solving exercises, OSCE	
DR14.2	Identify and distinguish urticaria and angioedema from other skin lesions and provide basic management	K/S	KH/SH	Y	SGT, Bedside teaching, Video LGT	Written examination, Tutorials, OSCE, Picture based MCQs	
DR14.3	Demonstrate Dermographism	S	SH	Y	Bedside teaching, DOAP	DOPS	2
Topic 15: Pyoderma Number of competencies: (03) Number of competencies that require certification: (NIL)							
DR15.1	Identify the clinical presentation of various types of cutaneous bacterial infections	K/S	KH/SH	Y	Bedside teaching, Video LGT, SGT	Written,Tutorials, Picture based MCQs, OSCE	
DR15.2	Enumerate the indications and adverse reactions of topical and systemic drugs used in the treatment of pyoderma	K	KH	Y	LGT, SGT, Symposium, Flipped Classroom	Written,Tutorials, Prescription	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/S H/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number Required to certify P
						writing, Problem solving exercises	
DR15.3	Recognize the need for surgical referral in pyoderma	K	KH	Y	Video LGT, Bedside teaching, SGT	Written, Tutorials, OSCE	

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