



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A++' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai -410 209

Tel 022-27432471, 022-27432994, Fax 022 -27431094

E-mail: registrar@mgmuhs.com; Website :www.mgmuhs.com

COMPETENCY BASED MEDICAL EDUCATION (CBME)

(with effect from 2019-2020 Batches)

Curriculum for Second M.B.B.S Forensic Medicine and Toxicology

Amended upto AC-51/2025, Dated 29/04/2025

Amended History

1. Approved as per BOM 57/2019 [Resolution no. 3.1.2.2], Dated 26/4/2019.
2. **Item 05 of BOS** : Format for Forensic Medicine University theory and Practical Examination CBME
Resolution No.3.24 of Academic Council (AC-42/2022): Resolved to approve the format for Forensic Medicine University theory and practical examination CBME batch. **[ANNEXURE – 19A, 19B, 19C]**
3. Amended as per AC-44/2022, [Resolution No. 5.59], [Resolution No. 5.20], dated 09/12/2022.
4. Amended as per AC- 50/2024, [Resolution No. 4.62], [Resolution No. 4.63], [Resolution No. 4.64], [Resolution No. 4.65]; dated 27/11/2024.
5. Amended as per AC-51/2025, [Resolution No. 4.18 (Annexure-40E & 40F)]; [Resolution No. 4.19 (Annexure-41)]; [Resolution No. 4.20 (Annexure-42)]; [Resolution No. 4.21 (Annexure-43D)]; [Resolution No. 4.22 (Annexure-44D1 & 44D2)]; Dated 29/04/2025.
(For admission batch 2023 & 2024)

Resolution No. 4.62 of Academic Council (AC-50/2024): Resolved that there will be no change in the format for the University Practical Examination (FMT). Only weightage for each exercise in the final will be reduced to 50%.

दूरभाष/Phone : 25367033, 25367035, 25367036

फेक्स/Fax : 0091-11-25367024

ई-मेल/E-mail : ug@nmc.org.in,

पॉकेट-14, सेक्टर-8, द्वारका,

फेस-1, नईदिल्ली-77

Pocket- 14, Sector- 8, Dwarka,

Phase - 1, New Delhi-77

राष्ट्रीय आयुर्विज्ञान आयोग

**National Medical Commission
(Undergraduate Medical Education Board)**

No. U.14021/8/2023-UGMEB


Dated, the 01st August, 2023

**Subject: - Competency Based Medical Education Curriculum (CBME)
Guidelines- National Medical Commission.**

Under Graduate Medical Education Board invited comments on draft Competency Based Medical Education Guidelines vide Public Notice of even no. dated 23/06/2023.

2. After consideration of comments received, in exercise of powers conferred by the National Medical Commission Act, 2019 and particularly by sections 10, 24, 25, and 57 of the said Act, Under Graduate Medical Education Board publishes the Competency Based Medical Education Guidelines.

3. Guidelines shall be effective from the date of its publication i.e.; 01/08/2023.



01/08/2023

(Shambhu Sharan Kumar)
Director, UGMEB

d. Integration: Practical knowledge of use of drugs in Clinical Practice will be acquired through Integrated Teaching vertically with phase 1 subjects and horizontally with other phase 2 subjects.

3rd Professional year

7. FORENSIC MEDICINE AND TOXICOLOGY

a. Competencies: The learner must demonstrate:

- Understanding of medico-legal responsibilities of physicians in primary and secondary care settings,
- Understanding of the rational approach to the investigation of crime, based on scientific and legal principles,
- Ability to manage medical and legal issues in cases of poisoning /overdose,
- Understanding the medico-legal framework of medical practice and medical negligence,
- Understanding of codes of conduct and medical ethics,
- Understanding concept of deceased donor, brain death, and Human Organ Transplantation Act.

b. Broad subject specific objectives:

Knowledge: At the end of the course, the student shall be able to

- Identify the basic Medico-legal aspects of hospital and general practice.
- Define the Medico-legal responsibilities of a general physician while rendering community service either in a rural primary health centre or an urban health centre.

- Appreciate the physician's responsibilities in criminal matters and respect for the codes of Medical ethics.
- Diagnose, manage and identify legal aspect of common acute and chronic poisonings.
- Describe the Medico-legal aspects and findings of post-mortem examination in cases of death due to common unnatural conditions and poisonings.
- Detect occupational and environmental poisoning, prevention and epidemiology of common poisoning and their legal aspects particularly pertaining to Workmen's Compensation Act.
- Describe the general principles of analytical toxicology.

c. Skills

At the end of the course, the student shall be able to

- Make observations and draw logical inferences in order to initiate enquiries in criminal matters and Medico-legal problems and be able to -
- Carry on proper Medico-legal examination and documentation/Reporting of Injury and Age.
- Conduct examination for sexual offences and intoxication.
- Preserve relevant ancillary materials for medico-legal examination.
- Identify important post-mortem findings in common unnatural deaths.
- Diagnose and treat common emergencies in poisoning and chronic toxicity.
- Make observations and interpret findings at post-mortem examination.
- Observe the principles of medical ethics in the practice of his profession.

d. Integration:

The teaching should be aligned and integrated horizontally and vertically recognizing the importance of medico-legal, ethical and toxicological issues as they relate to the practice of medicine.

8. COMMUNITY MEDICINE

a. Competencies: The undergraduate must demonstrate:

Resolution No. 4.64 of Academic Council (AC-50/2024): Resolved that new Lecture hours 42 for II year (FMT) and 130 for III year (FMT) will be implemented for the batch 2023. [ANNEXURE-79A & 79B]

Table No. 5 - Distribution of Subject Wise Teaching Hours for II MBBS

Subjects	Lectures	SGL	Clinical Postings*	SDL	Total
Pathology	80	165	-	10	255
Pharmacology	80	165	-	10	255
Microbiology	70	135	-	10	215
Community Medicine	15	0	0	10	25
FAP	0	0	30	-	30
Forensic Medicine and Toxicology	12	22	-	08	42
Clinical Subjects	59	-	540	-	599
AETCOM	-	29	-	8	37
Sports and extra-curricular activities	-	-	-	20	35
Pandemic module				28	28
Final total	316	516	585	104	1521

Note : Clinical postings shall be for 3 hours per day, Monday to Friday.

There will be 15 hours per week for all clinical postings.

Table No. 6 - Distribution of Subject Wise Teaching Hours for Final MBBS part 1

Subject	Lectures	SGL	SDL	Total
Electives	0	156	0	156
Gen. Med.	30	50	10	90
Gen Surgery	30	50	10	90
Obs. & Gyn	30	50	10	90
Pediatrics	25	30	10	65
Ortho+ PMR	15	20	10	45
For. Med.& Tox.	40	70	20	130
Community Med	55	70	20	145
FAP (Visits +log book submission)	-	21	10	31
Otorhinolaryngology (ENT)	15	20	10	45
Ophthalmology	15	20	10	45
Clinical posting	-	-	540	540
AETCOM	0	19	12	31
Pandemic module	18	0	0	18
Total	273	546	672	1521



Competency No.	The student should be able to	Teaching Method	Lecture Topics	No. of Hours
General Information Number of Competencies: (11) Number of Procedures that require certification: (Nil)				
FM1.1	Demonstrate knowledge of basics of Forensic Medicine like definitions of Forensic medicine, Clinical Forensic Medicine, Forensic Pathology, State Medicine, Legal Medicine and Medical Jurisprudence.	Lecture	Introduction to FMT	L-1
FM1.2	Describe history of Forensic Medicine			
FM1.3	Describe legal procedures including Criminal Procedure Code, Indian Penal Code, Indian Evidence Act, Civil and Criminal Cases, Inquest (Police Inquest and Magistrate's			

	Inquest), Cognizable and Non-cognizable offences	Lecture	Legal Procedure	L-2
FM1.4	Describe Courts in India and their powers: Supreme Court, High Court, Sessions court, Magistrate's Court, Labour Court, Family Court, Executive Magistrate Court and Juvenile Justice Board			
FM1.5	Describe Court procedures including issue of Summons, conduct money, types of witnesses, recording of evidence oath, affirmation, examination in chief, cross examination, re-examination and court questions, recording of evidence & conduct of doctor in witness box	Lecture	Legal Procedure	L-3
FM1.6	Describe Offenses in Court including Perjury; Court strictures vis-a vis Medical Officer	Small Group Discussion	Legal Procedure	S - 1
FM1.7	Describe Dying Declaration & Dying Deposition		Legal Procedure	
FM1.8	Describe the latest decisions / notifications / resolutions /circulars / standing orders related to medico-legal practice issued by Courts / Government authorities etc.		Legal Procedure	

FM1.9	<p>Describe the importance of documentation in medical practice in regard to medico-legal examinations, Medical Certificates and medico-legal reports especially</p> <p>- Maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centres.</p> <p>- Maintenance of medico-legal register like accident registers.</p> <p>- documents of issuance of wound certificate</p> <p>- documents of issuance of drunkenness certificate</p> <p>- documents of issuance of sickness and fitness certificate.</p> <p>- documents for issuance of death certificate. - documents of Medical Certification of Cause of Death - Form Number4 and 4A</p> <p>- documents for estimation of age by physical, dental and radiological examination and insurance of certificate</p>	Small Group Discussion	Legal Procedure	S-2
FM1.10	Select appropriate cause of death in a particular scenario by referring ICD 10 code	Practical	Legal Procedure	Pract.-1
FM1.11	Write a correct cause of death certificate as per ICD 10 document		Legal Procedure	
<p>Topic: Forensic Pathology Number of competencies: (35) Number of procedures that require certification : (NIL)</p>				
FM2.1	Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brainstem Death	Lecture	Death & its causes	

FM2.2	Describe and discuss natural and unnatural deaths	Lecture	Death & its causes	L-4
FM2.3	Describe and discuss issues related to sudden natural deaths	Lecture	Death & its causes	
FM2.4	Describe salient features of the Organ Transplantation and The Human Organ Transplant (Amendment) Act 2011 and discuss ethical issues regarding organ donation	Small Group Discussion	Medical Ethics & Laws	S-3
FM2.5	Discuss moment of death, modes of death - coma, asphyxia and syncope	Lecture	Death & its causes	L-4
FM2.6	Discuss presumption of death and survivorship	Lecture	Death & its causes	
FM2.7	Describe and discuss suspended animation	Small Group Discussion	Post Mortem Changes	S-4
FM2.8	Describe and discuss postmortem changes including signs of death, cooling of body, post-mortem lividity, rigor mortis, cadaveric spasm, cold stiffening and heat stiffening	Small Group Discussion	Post Mortem Changes	DOAP -1
FM2.9	Describe putrefaction, mummification, adipocere and maceration	Small Group Discussion	Post Mortem Changes	SDL -1
FM2.10	Discuss estimation of time since death	Small Group Discussion	Post Mortem Changes	S-4

FM2.11	Describe and discuss autopsy procedures including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination	Lecture	Medicolegal Autopsy	L-5
FM2.12	Describe the legal requirements to conduct post-mortem examination and procedures to conduct medico-legal post-mortem examination	Lecture	Medicolegal Autopsy	L-5
FM2.13	Describe and discuss obscure autopsy	Lecture	Medicolegal Autopsy	L-5
FM2.14	Describe and discuss examination of clothing, preservation of viscera on post-mortem examination for chemical analysis and other medico-legal purposes, post-mortem artifacts	Lecture	Medicolegal Autopsy	L-5
FM 2.15	Describe special protocols for conduction of medico-legal autopsies in cases of death in custody or following violation of human rights as per National Human Rights Commission Guidelines	Small Group Discussion	Medicolegal Autopsy	S-5
FM2.16	Describe and discuss examination of mutilated bodies or fragments, charred bones and bundle of bones	Small Group Discussion	Medicolegal Autopsy	S-6
FM2.17	Describe and discuss exhumation	Small Group Discussion	Medicolegal Autopsy	S-6
FM2.18	Crime Scene Investigation:- Describe and discuss the objectives of crime scene visit, the duties & responsibilities of doctors on crime scene and the reconstruction	Lecture	Medicolegal Autopsy	L-6

	of sequence of events after crime scene investigation			
FM2.19	Investigation of anesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences	Small Group Discussion	Anesthetic & operative deaths	S-7
FM2.20	Mechanical asphyxia: Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxial deaths	Lecture	Asphyxia	L-7
FM2.21	Mechanical asphyxia: Describe and discuss different types of hanging and strangulation including clinical findings, causes of death, post-mortem findings and medico-legal aspects of death due to hanging and strangulation including examination, preservation and dispatch of ligature material	Lecture + Autopsy	Asphyxia	L-7
FM2.22	Mechanical asphyxia: Describe and discuss patho-physiology, clinical features, postmortem findings and medico-legal aspects of traumatic asphyxia, obstruction of nose & mouth, suffocation and sexual asphyxia	Lecture	Asphyxia	L-8
FM2.23	Describe and discuss types, patho-physiology, clinical features, postmortem findings and medico-legal aspects of drowning, diatom test and, Gettler test.	Lecture	Asphyxia	L-8
FM2.24	Thermal deaths: Describe the clinical features, post-mortem finding and medico-legal aspects of injuries due to physical agents like heat (heat-hyper-pyrexia, heat stroke, sun stroke, heat exhaustion/prostration, heat cramps [miner's cramp] or cold (systemic and localized hypothermia, frostbite, trenchfoot, immersion foot)	Lecture	Thermal Injuries	L-9

FM2.25	Describe types of injuries, clinical features, patho-physiology, postmortem findings and medico-legal aspects in cases of burns, scalds, lightening, electrocution and radiations	Lecture	Thermal Injuries	L-9
FM2.26	Describe and discuss clinical features, post-mortem findings and medico-legal aspects of death due to starvation and neglect	Small Group Discussion	Starvation	SDL-2
FM2.27	Define and discuss infanticide, foeticide and stillbirth	Lecture	Infanticide	L-10
FM2.28	Describe and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP session of ossification centres, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	Small Group Discussion	Infanticide	S-8
FM2.29	Demonstrate respect to the directions of courts, while appearing as witness for recording of evidence under oath or affirmation, examination in chief, cross examination, re-examination and court questions, recording of evidence	Moot Court	Legal procedure	S-9
FM2.30	Have knowledge/awareness of latest decisions / notifications / resolutions / circulars / standing orders related to medico-legal practice issued by Courts / Government authorities etc	Small Group Discussion	Recent updates	S-10
FM2.31	Demonstrate ability to work in a team for conduction of medico-legal autopsies in cases of death following alleged negligence medical dowry death, death in custody or following violation of human rights as per National Human Rights Commission Guidelines on exhumation	Lecture	Medical ethics and law	L-11
FM2.32	Demonstrate ability to exchange information by verbal, or nonverbal communication to the peers, family members, law enforcing agency and judiciary	Lecture	Medical ethics and law	L-11
FM2.33	Demonstrate ability to use local resources			L-12

	whenever required like in mass disaster situations	Lecture	Mass disaster	
FM2.34	Demonstrate ability to use local resources whenever required like in mass disaster situations	Lecture	Mass disaster	L-12
FM2.35	Demonstrate professionalism while conducting autopsy in medicolegal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	Small Group Discussion	Medicolegal Autopsy	DOAP-2
Topic: Clinical Forensic Medicine Number of competencies:(33) Number of procedures that require certification: (NIL)				
FM3.1	IDENTIFICATION Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age determination using morphology, teeth-eruption, decay, bite marks, bones-ossification centres, medico-legal aspects of age	Lecture	Identification	L-13
FM3.2	IDENTIFICATION Describe and discuss identification of criminals, unknown persons, dead bodies from the remains-hairs, fibers, teeth, anthropometry, dactylography, foot prints, scars, tattoos, poroscopy and superimposition	Lecture	Identification	L-13
FM3.3	Mechanical injuries and wounds: Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self-inflicted/fabricated wounds and their medico-legal aspects	Lecture	Mechanical injury	L-14
FM3.4	Mechanical injuries and wounds: Define injury,			

	assault & hurt. Describe IPC pertaining to injuries	Lecture	Mechanical injury	L-14
FM3.5	Mechanical injuries and wounds: Describe accidental, suicidal and homicidal injuries. Describe simple, grievous and dangerous injuries. Describe ante-mortem and post-mortem injuries	Lecture	Mechanical injury	L-14
FM3.6	Mechanical injuries and wounds: Describe healing of injury and fracture of bones with its medico-legal importance	Lecture	Mechanical injury	L-14
FM3.7	Describe factors influencing infliction of injuries and healing, examination and certification of wounds and wound as a cause of death: Primary and Secondary	Small Group Discussion	Mechanical injury	S-11
FM3.8	Mechanical injuries and wounds: Describe and discuss different types of weapons including dangerous weapons and their examination	Practical	Mechanical injury	Pract.-2
FM3.9	Firearm injuries: Describe different types of firearms including structure and components. Along with description of ammunition propellant charge and mechanism of fire-arms, different types of cartridges and bullets and various terminology in relation of firearm – caliber, range, choking	Small Group Discussion	Mechanical injury	SDL -3
FM3.10	Firearm injuries: Describe and discuss wound ballistics-different types of firearm injuries, blast injuries and their interpretation, preservation and dispatch of trace evidences in cases of firearm and blast injuries, various tests related to confirmation of use of firearms	Small Group Discussion	Mechanical injury	SDL - 4
FM3.11	Regional Injuries:			

	Describe and discuss regional injuries to head (Scalp wounds, fracture skull, intracranial haemorrhages, coup and contrecoup injuries), neck, chest, abdomen, limbs, genital organs, spinal cord and skeleton	Lecture	Regional injury	L-15
FM3.12	Regional Injuries Describe and discuss injuries related to fall from height and vehicular injuries – Primary and Secondary impact, Secondary injuries, crush syndrome, railway spine	Lecture	Regional injury	L-15
FM3.13	Describe different types of sexual offences. Describe various sections of IPC regarding rape including definition of rape (Section 375 IPC), Punishment for Rape (Section 376 IPC) and recent amendments notified till date	Small Group Discussion	Sexual offences	S-12
FM3.14	SEXUAL OFFENCES Describe and discuss the examination of the victim of an alleged case of rape, and the preparation of report, framing the opinion and preservation and despatch of trace evidences in such cases	Practical	Sexual offences	Pract.-3
FM3.15	SEXUAL OFFENCES Describe and discuss examination of accused and victim of sodomy, preparation of report, framing of opinion, preservation and dispatch of trace evidences in such cases	Practical	Sexual offences	Pract.-4
FM3.16	SEXUAL OFFENCES Describe and discuss adultery and unnatural sexual offences sodomy, incest, lesbianism, buccal coitus, bestiality, indecent assault and preparation of report, framing the opinion and preservation and despatch of trace evidences in such cases	Seminar-	Sexual Offences	Seminar-1
FM3.17	Describe and discuss the sexual perversions fetishism, transvestism, voyeurism, sadism, necrophagia, masochism, exhibitionism,	Small Group Discussion	Sexual Offences	SDL-5

	frotteurism, Necrophilia			
FM3.18	Describe anatomy of male and female genitalia, hymen and its types. Discuss the medico-legal importance of hymen. Define virginity, defloration, legitimacy and its medicolegal importance	Small Group Discussion	Virginity	S-13
FM3.19	Discuss the medicolegal aspects of pregnancy and delivery, signs of pregnancy, precipitate labour, superfoetation, superfecundation and signs of recent and remote delivery in living and dead	Lecture	Pregnancy and delivery	Integrated -1
FM3.20	Discuss disputed paternity and maternity	Seminar	Pregnancy and delivery	Seminar - 2
FM3.21	Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC&PNDT) - Prohibition of Sex Selection Act 2003 and Domestic Violence Act 2005	Seminar	Pregnancy and delivery	Seminar - 3
FM3.22	Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation. Discuss the causes of impotence and sterility in male and female	Lecture	Impotence and sterility	Integrated -2
FM3.23	Discuss Sterilization of male and female, artificial insemination, Test Tube Baby, surrogate mother, hormonal replacement therapy with respect to appropriate national and state laws	Lecture	Impotence and sterility	Integrated -3
FM3.24	Discuss the relative importance of surgical methods of contraception (vasectomy and tubectomy) as methods of contraception in the National Family Planning Programme	Lecture	Impotence and sterility	Integrated-4
FM3.25	Discuss the major results of the National Family Health Survey	Lecture	Impotence and sterility	Integrated-5
FM3.26	Discuss the national Guidelines for accreditation, supervision & regulation of ART Clinics in India	Lecture	Impotence and sterility	Integrated-6

FM3.27	Define, classify and discuss abortion, methods of procuring MTP and criminal abortion and complication of abortion. MTP Act 1971	Lecture	Abortion	Integrated -7
FM3.28	Describe evidences of abortion - living and dead, duties of doctor in cases of abortion, investigations of death due to criminal abortion	Lecture	Abortion	Integrated-8
FM3.29	Describe and discuss child abuse and battered baby syndrome	Small Group Discussion	Infanticide	S-14
FM3.30	Describe and discuss issues relating to torture, identification of injuries caused by torture and its sequelae, management of torture survivors	Small Group Discussion	Medicolegal Aspect of Injuries	S-15
FM3.31	Torture and Human rights Describe and discuss guidelines and Protocols of National Human Rights Commission regarding torture	Small Group Discussion	Medicolegal Aspect of Injuries	S-15
FM3.32	Demonstrate the professionalism while preparing reports in medicolegal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	Small Group Discussion	Legal procedure	S-16
FM3.33	Should be able to demonstrate the professionalism while dealing with victims of torture and human right violations, sexual assaults psychological consultation, rehabilitation	Small Group Discussion	Medical ethics and laws	S-15

Resolution No. 4.63 of Academic Council (AC-50/2024): Resolved that one of the AETCOM module (FMT) out of the two i.e. AETCOM No. 3.3 C & 3.4 will be covered in second year so that one compulsory question can be arranged in the 1st PCT exam. [ANNEXURE-78]

AETCOM Competencies for Third Year (Part I)

Forensic Medicine & Toxicology	3.3 C	Administer informed consent and appropriately address patient queries to a patient undergoing a surgical procedure in a simulated environment
	3.4	Identify, discuss and defend medico-legal, socio-cultural and ethical issues as it pertains to confidentiality in patient care

Resolution No. 5.19 of Academic Council (AC-44/2022): Resolved to approve the modifications in the competencies (CBME) of Forensic Medicine subject Nos. FM 3.16, FM 3.13, FM 3.17, FM 3.18 & FM 14.14, FM 14.15 & PS 13.1 to 13.17 in MBBS in FMT for Theory with effect from the batch admitted in Academic Year 2022-23 onwards. Further it was clarified that the Psychiatry Competencies (PS 13.1 to 13.17) are related to Forensic Psychiatry [ANNEXURE-22J.

Sr	Existing competency	Modified Competency
	Forensic Medicine Competency	
1.	FM3.16 Describe and discuss adultery and unnatural sexual offences- sodomy, incest, lesbianism, buccal coitus, bestiality, indecent assault and preparation of report, framing the opinion and preservation and despatch of trace evidences in such cases.	FM 3.16: Describe and discuss informed consent in sexual intercourse. Describe and discuss histories of gender and sexuality-based (sexual orientation) identities and rights in India. Describe history of decriminalisation of 'adultery' and consensual adult homosexual sexual behaviour. Describe sexual offences with its medicolegal significance— <ul style="list-style-type: none"> - forced/non-consensual penetrative anal sex - forced/non-consensual oral sex - sexual acts with animals/ bestiality/ zoophilia - forced/non-consensual insertion of fingers or objects - forced/non-consensual touching or groping or disrobing ('indecent assault').

Sr	Existing competency	Modified Competency
2.	<p>FM3.13: Describe different types of sexual offences. Describe various sections of IPC regarding rape including definition of rape (Section 375 IPC), Punishment for Rape (Section 376 IPC) and recent amendments notified till date</p>	<p>FM3.13: Describe various sections of IPC & CrPC related to definition of rape and sexual assault, medical examination of rape victim and accused of rape, police information by the doctors and medical care with recent amendments notified till date (i.e., Section 375 IPC, 166 B IPC, 357 C & 164 A, 53 A of CrPC).</p> <p>Describe the relevant provisions of POCSO act related to medical examination, emergency medical care and police information.</p>
3.	<p>FM3.17: Describe and discuss the sexual perversions fetishism, transvestism, voyeurism, sadism, necrophagia, masochism, exhibitionism, frotteurism, Necrophilia.</p>	<p>FM3.17. Describe the difference between Paraphilia and Paraphilic disorder. Describe paraphilic disorder as per as per the latest guidelines of DSM & ICD and describe medico-legal implications of paraphilic disorder by referring scientific literature and legal justification (if any).</p> <p>Describe and discuss the various paraphilias in the context of informed consent during any sexual interaction.</p>
4.	<p>FM3.18 Describe anatomy of male and female genitalia, hymen and its types. Discuss the medico-legal importance of hymen. Define virginity, defloration, legitimacy and its medicolegal importance.</p>	<p>FM3.18 Describe legitimacy and its medicolegal importance.</p> <p>Describe and discuss how 'signs' of virginity (so called 'virginity test', including finger tests on female genitalia) are unscientific, inhuman and discriminatory.</p> <p>Describe and discuss how to appraise the courts about unscientific basis of these tests if court orders it.</p>

Sr	Existing competency	Modified Competency
5.	FM14.14: To examine & prepare report of an alleged accused in rape/unnatural sexual offence in a simulated/ supervised environment	<p>FM14.14: To examine and prepare report on an alleged accused person in cases of various sexual offences in a simulated/ supervised environment.</p> <p>Demonstrate an understanding of framing the opinion, preservation and despatch of trace evidences in such cases.</p> <p>Describe and discuss personal opinions and their impact on such examinations and the need for objectivity/neutrality to avoid prejudice influencing the case.</p>
6.	FM14.15 To examine & prepare medico-legal report of a victim of sexual Offence /unnatural sexual offence in a simulated/ supervised environment.	<p>FM 14.15 To examine and prepare medico-legal report on an alleged victim of various sexual offences in a simulated/ supervised environment. (Guidelines and Protocols of Medico Legal Care for Survivors Victims of Sexual Violence. Ministry of Health & Family Welfare, GOI- with latest modifications if any).</p> <p>Demonstrate an understanding of framing the opinion and preservation and despatch of trace evidences in such cases.</p> <p>Describe and discuss sympathetic/ empathetic examination and interview of victims of sexual assault, including presence of trusted adult figure in cases of minor victims.</p>
Psychiatry Competency:		
7.	Topic Name: Psychosexual and gender identity disorders (Vol II Page 210)	<p>Topic Name:</p> <p>Human sexuality;</p> <p>Gender incongruence or Gender dysphoria;</p> <p>Gender non-conformity;</p>

Sr	Existing competency	Modified Competency
		Differences of sex development (DSD) or Intersex; Paraphilia and Paraphilic disorders; Sexual dysfunctions.
8.	<p>PS 13.1: Enumerate and describe the magnitude and etiology of psychosexual and gender identity disorders.</p> <p>PS13.2 Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosexual and gender identity disorders.</p> <p>PS13.3 Enumerate and describe the indications and interpret laboratory and other tests used in psychosexual and gender identity disorders</p> <p>PS 13.4 Describe the treatment of psychosexual and gender identity disorders including behavioural, psychosocial and pharmacologic therapy.</p> <p>PS13.5 Demonstrate family education in a patient with psychosexual and gender identity disorders in a simulated environment.</p>	<p>PS13.1:</p> <p>Demonstrate an understanding of difference between sex and gender/ biological and social construction of personhood;</p> <p>Demonstrate an understanding of gender identity;</p> <p>Demonstrate an understanding of transgender, gender non-conformity, and other gender diverse identities.</p> <p>Demonstrate an understanding of sexual/sexuality identity, sexual orientation, sexual desire;</p> <p>Demonstrate an understanding of the wide variety of sexual orientations and desires;</p> <p>Describe and demonstrate an understanding of the differences in sex development in individuals who don't fit into the biological binary of male or female.</p> <p>Demonstrate an understanding of common myths and misconceptions about LGBTQIA + identities like Hijra, Intersex.</p> <p>Demonstrate an attitude of openness and respect for all genders and sexualities.</p> <p>Demonstrate an understanding of common psychosocial stressors faced by members of LGBTQIA+ communities in India.</p> <p>Demonstrate Knowledge about basic tenets of LGBTQIA+ affirmative counselling.</p>

Sr	Existing competency	Modified Competency
	<p data-bbox="350 289 750 527">PS13.6 Enumerate and describe the pharmacologic basis and side effects of drugs used in psychosexual and gender identity disorders.</p> <p data-bbox="350 600 760 684">PS13.7 Enumerate the appropriate conditions for specialist referral</p>	<p data-bbox="789 239 1318 476">PS13.2: Demonstrate the ability to assess the gender identity of an individual and distress caused (if any) due to the individual's own gender identity in a simulated environment.</p> <p data-bbox="789 499 1325 789">PS13.3: Describe and understand how to discuss sexual orientation, sexuality identity, gender identity, as well as intersex identity (differences in sex development) as part of routine history taking.</p> <p data-bbox="789 812 1318 1146">PS13.4: Demonstrate in simulated environment the ability to educate and counsel individuals or family members about intersex variations, sexual orientations, sexuality identities, gender incongruence, gender dysphoria, and gender identities. Demonstrate knowledge that conversion therapy practices for sexual orientation or gender identity or on people with intersex variations are unethical.</p> <p data-bbox="789 1379 1344 1766">PS13.5: Describe differences between Gender Incongruence and Gender Dysphoria. Describe and demonstrate an understanding of the biological and gender binaries, rejection of gender binary, gender non-conforming, gender non-binary, androgynous, and other identities.</p> <p data-bbox="789 1789 1269 1873">PS13.6: Describe and discuss Gender Dysphoria.</p>

Sr	Existing competency	Modified Competency
		<p>Enumerate criteria to diagnose Gender Dysphoria according to the latest psychiatric classifications (refer to WPATH guidelines) and when to refer an individual to a mental health professional.</p> <p>PS13.7</p> <p>Demonstrate in the simulated environment the ability to educate an individual and family members that Gender Incongruence by itself is not a disorder and does not require clinical intervention.</p> <p>Discuss situations where there is a role for mental health support in Gender Dysphoria i.e., discussing with family, deciding on hormonal treatments or Sex Reassignment Surgery (Gender Affirming Care or Gender Affirmative Therapies or Gender Confirmation Surgery).</p> <p>Demonstrate in simulated environment the ability to educate and counsel individual and family members about various types of sexual orientation being normal.</p> <p>PS13.8</p> <p>Demonstrate in simulated environment the ability to educate an individual and family members that the gender of an individual can be different than the sex assigned at birth and also educate about the difference between sex and gender of an individual.</p> <p>Demonstrate the ability to assess gender incongruence in an individual with intersex variations due to their gender identity.</p>

Sr	Existing competency	Modified Competency
		<p>Demonstrate knowledge and ability to educate family members that unnecessary medical interventions on individuals with intersex variations are unethical.</p> <p>PS13.9:</p> <p>Describe the difference between Paraphilia and Paraphilic disorder.</p> <p>Describe different paraphilias.</p> <p>Describe and discuss the importance of informed consent during any sexual interaction.</p> <p>Describe and discuss impact of personal opinions on working with people who express paraphilias.</p> <p>PS13.10:</p> <p>Describe the prevalence & etiology of paraphilic disorders.</p> <p>PS13.11:</p> <p>Enumerate criteria for the diagnosis (diagnostic criteria) of paraphilic disorders according to the latest psychiatric classification.</p> <p>PS13.12:</p> <p>Demonstrate in the simulated environment the ability to educate the individual/family members that paraphilia in itself is not a disease and may not require clinical intervention.</p> <p>PS13.13:</p> <p>Enumerate the reasons for specialist referrals for any of the cases.</p> <p>PS13.14:</p>

Sr	Existing competency	Modified Competency
		<p>Describe the stages and differences in the human sexual cycle.</p> <p>PS13.15:</p> <p>Enumerate the diagnostic criteria of various sexual dysfunctions corresponding to the stages of the human sexual cycle.</p> <p>PS13.16:</p> <p>Describe the management (till the level of MBBS graduate domain) and reasons for specialist referral in cases of sexual dysfunction.</p>

Resolution No. 5.20 of Academic Council (AC-44/2022): Resolved to approve the topics identified for integration with other departments in MBBS in FMT for Theory with effect from the batch admitted in Academic Year 2022-23 onwards [ANNEXURE-23J.

Annexure-23 of AC-44/2022

**MGM MEDICAL COLLEGE, KAMOTHE
NAVIMUMBAI
DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY
Topics Identified for Integration**

Sr. No.	Comp. No.	Competency	Topic for Integration	Sub-Topic needed	Department for Integration
1	FM1.9	Describe the importance of documentation in medical practice in regard to medico-legal examinations, Medical Certificates and medico-legal reports especially - Maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centers. - Maintenance of medico-legal register like accident registers. - Documents of issuance of wound certificate - Documents of issuance of drunkenness certificate. - Documents of issuance of sickness and fitness certificate. - Documents for issuance of death certificate. -documents of Medical Certification of Cause of Death- Form Number 4 and 4A documents for estimation of age by physical, dental and radiological examination and issuance of certificate	Wound Certificate Sickness/fitness certificate Estimation of age by Physical, dental & radiological examination	- - -	General Surgery, General Medicine, Pediatrics
2	FM2.1 MPJ	Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brainstem Death	Somatic /Clinical/Cellular & Brain death, Cortical death	-	Pathology
3	FM2.2 MPJ	Describe and discuss natural and unnatural deaths	Cell death, Nuclear death (Apoptosis, Necrosis cell death)	-	Pathology

Sr. No.	Comp. No.	Competency	Topic for Integration	Sub – Topic needed	Department for Integration
4	FM2.3 MPJ	Describe and discuss issues related to sudden natural deaths	Molecular & cellular changes in sudden natural death	-	Pathology
5	FM2.5 MPJ	Discuss moment of death, modes of death - coma, asphyxia and syncope	Cellular changes seen in Asphyxia & syncope of coma	-	Psychiatry, Pathology
6	FM2.11 MPJ	Describe and discuss autopsy procedures including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination	Cellular changes seen in autopsy & post-mortem examination objective of Autopsy	-	Pathology
7	FM2.12 MPJ	Describe the legal requirements to conduct post-mortem examination and procedures to conduct medico-legal post-mortem examination	Autopsy cellular changes	-	Pathology
8	FM2.13 MPJ	Describe and discuss obscure autopsy	Cellular changes in post-mortem	-	Pathology
9	FM2.19	Investigation of anesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences	++	-	Anesthesiology, General Surgery
10	FM3.1	IDENTIFICATION Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age determination using morphology, teeth-eruption, decay, bite marks, bones-ossification centers, medico-legal aspects of age	Define and describe age determination sex determination using morphology , teeth eruption , decay, bite marks, bones-ossification centers, medico-legal aspects of age	-	Human Anatomy

Sr. No.	Comp. No.	Competency	Topic for Integration	Sub – Topic needed	Department for Integration
11	FM3.20	Discuss disputed paternity and maternity		-	Obstetrics & Gynecology
12	FM2.27	Define and discuss infanticide, foeticide and stillbirth	infanticide, foeticide and stillbirth	-	Pediatrics
13	FM2.28	Describe and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP session of ossification centers, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	Molecular and cellular changes of intrauterine death, sign of live birth, viability of foetus, age determination of foetus, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	-	Pediatrics, Human Anatomy
14	FM3.29	Describe and discuss child abuse and battered baby syndrome	child abuse and battered baby syndrome	-	Pediatrics
15	FM6.1	Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids (blood, urine, semen, faces saliva), Skin, Nails, tooth pulp, vaginal smear, viscera, skull, specimen for histo-pathological examination, blood grouping, HLA Typing and DNA Fingerprinting. Describe Locard's Exchange Principle	, blood grouping, HLA Typing and DNA Fingerprinting. Describe Locard's Exchange Principle	-	Pathology
16	FM8.1	Describe the history of Toxicology		-	Pharmacology
17	FM8.2	Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison	Poison toxins and management	-	Pharmacology
18	FM8.3	Describe the various types of poisons, Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead	Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead	-	Pharmacology

Sr. No.	Comp. No.	Competency	Topic for Integration	Sub-Topic needed	Department for Integration
19	FM8.4	Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons	, Medico-legal aspects of poisons	-	Pharmacology
20	FM8.5	Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis	preservation and dispatch of viscera for chemical analysis	-	Pharmacology
21	FM8.6	Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India	general symptoms, principles of diagnosis and management of common poisons encountered in India	-	Pharmacology
22	FM8.7	Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids	Bedside clinic tests to detect poison/drug in a patient's body fluids	-	Pharmacology
22	FM8.8	Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination	methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination	-	General Medicine Pharmacology
23	FM13.1	Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	-	General Medicine

Sr. No.	Comp. No.	Competency	Topic for Integration	Sub – Topic needed	Department for Integration
24	FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	-	General Medicine
25	FM14.7	Demonstrate & identify that a particular stain is blood and identify the species of its origin	identify that a particular stain is blood and identify the species of its origin	-	Pathology, Physiology
26	FM14.8	Demonstrate the correct technique to perform and identify ABO & RH blood group of a person	correct technique to perform and identify ABO & RH blood group of a person	-	Pathology, Physiology
27	FM 14.9	Optic Injuries -	Grievous hurt- IPC -319	-	Ophthalmology
28	FM 14.10	Human organ donation Act	Human organs /Corneal donation	-	Anatomy Ophthalmology

Resolution No. 3.2.2.1 of BOM-62/2020: Resolved to approve the restructured Formative and Summative assessment pattern for 2nd MBBS Para-Clinical disciplines (Microbiology, Pathology, Pharmacology and FMT) which is in line with Competency Based Medical Education (CBME) curriculum guidelines as mandated by MCI. [**Annexure-46A, 46B, 46C, 46D**]

Formative Assessment

Theory Portion (1st Internal Assessment)

50 Marks

- Introduction, general /history
- Identification- Estimation of age
- Age of foetus
- Death
- Signs of death
- Changes after death
- Time since death

Practical Portion (1st Internal Assessment)

50 Marks

- Estimation of age Bone age/ Teeth / Secondary sexual characteristic
- Age of foetus
- MCCD—certifications

Theory Portion (2nd Internal Assessment)

50 Marks

- Evidences- types
- Examination of stains
- Trace evidence
- Wet specimen
- Photograph
- X Rays
- Bones
- Weapons

Practical Portion (2nd Internal Assessment)

50 Marks

- Evidences- types
- Examination of stains
- Photograph
- X Rays
- Bones
- Weapons

Formative Exam – Theory, Time – 2 Hours

First and Second Formative Exam (Second Professional Year)					
	Section “A”	Section “B”	Section “C”	Section “D”	Total
	MCQ	SAQ	LAQ	Essay / Short Note /Recent advances / Opinion from	

Theory	0.5 Mark X20 (Compulsory)	5 Mark X 4 out of 5	10 Mark X 1 out of 2	given data /Situation with reasons /Problem based Question 10 Marks X 1 (Compulsory)	
Marks	10	20	10	10	50

First and 2nd Formative Exam – Practical (Second Professional Year)	
Practical Heads	Marks
Exercises	20
<ul style="list-style-type: none"> Prepare Injury Report from given data or Prepare Age Estimation from given data 	05
<ul style="list-style-type: none"> Prepare MCCD from given data 	05
<ul style="list-style-type: none"> Prepare Determination of age of Foetus 	05
<ul style="list-style-type: none"> Prepare Sickness or Fitness Certificate 	05
Spotters OSCE – 05 – Slides <ul style="list-style-type: none"> (Sperm / Blood Stain / Hair/ Fiber), Histopathology Slides, Photographs, X-rays, Instruments / Equipments, Models, Bones, Weapons, Documents, Specimens, Pathological / Biochemical Tests 	10

Viva- Voce (10 marks X 2 Tables)	20
Total	50

Time: 1 Hour for all Exercises,

2 Minute each for each Spotter station,

10 Minute at each table Viva

Resolution No.3.1.2.3 of BOM-59/2019: The updated list of Text books and Reference books for 2nd MBBS (Microbiology, Pharmacology, Pathology, FMT) are approved. [Annexure-8]

(To be merged with syllabus i.e. Annexure-69 of BOM-57/2019 dt.26/04/2019)

Resolution No. 5.18 of Academic Council (AC-44/2022): It was resolved to approve:

a) Change in the Day to Day assessment pattern for internal assessment calculations according to NMC norms in all paraclinical subjects.

b) Day to Day assessment for theory can be conducted online in the form of Google forms having structured questions like MCQ, one liners, Picture based questions (20 questions for 20 marks).

c) Day to Day assessment for Practical can be conducted as defined OSPE station /practical /Clinical test /DOPS (20 Marks).

All above said changes are to be implemented in the programme UG-MBBS in all Paraclinical Subjects for Theory & Practical with effect from the batch admitted in Academic Year 2022-23 onwards.

It was further resolved that suitable validation exercise must be undertaken for all online formats. [ANNEXURE-21A, 21B, 21C & 21D].

Recommended books

Text Books:

1. Modi's Text book of Medical Jurisprudence & Toxicology.
2. The Essentials of Forensic Medicine & Toxicology: K.S.N. Reddy.
3. Textbook of Forensic Medicine: JB. Mukharjee.
4. Principles of Forensic Medicine: A. Nandy.
5. Textbook of Forensic Medicine & Toxicology, Principles & Practice: Krishan Vij

Reference Books

1. Forensic Pathology by Bernard Knight
2. Handbook of Forensic Pathology by Vincent DiMaio & Suzanna E. Dana
3. Keith Simpson's Forensic Medicine.
4. Ross's post mortem Appearances
5. Forensic medicine-a guide to principle by Gordon & Shapiro
6. Forensic Medicine: A study in trauma & Environmental Hazards by Tedesch

For Additional Reading

1. "Informed consent in Medical Practice principles & conventions". Dr. Kalidas Chavan & Dr. Rajendra Banjal- Publishers: Jaypee Brothers, Mumbai.
2. The Making of A Doctor' R.S.Downie . Charlin Calmam 1992
3. 'The Medical Teacher' by Ken Cox Christine Ewan. 2nd edition 1988

Resolution No.3.24 of Academic Council (AC-42/2022): Resolved to approve the format for Forensic Medicine University theory and practical examination CBME batch. [ANNEXURE – 19A, 19B, 19C]

Annexure-19B of AC-42/2022

MGMIHS, Navi Mumbai

FORMAT / SKELETON OF QUESTION PAPER
Course and Year: MBBS-III Part- Applicable with effect from OCT-2022 and onwards examinations.
Subject: Forensic medicine and Toxicology
Total Marks: 100
Paper-I

Instructions:

SECTION “A” MCQ

- 1) Put ☐ in the appropriate box below the question number once only.
- 2) Use blue ball point pen only.
- 3) Each question carries **One mark**.
- 4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.

SECTION “A” MCQ (20 Marks)

1. Multiple Choice Questions (Total 20 MCQ of One mark each)

(20x 1=20)

- a) b) c) d) e) f) g) h) i) j)
k) l) m) n) o) p) q) r) s) t)

SECTION “B” & “C”

Instructions:

- 1) Use **blue/black** ball point pen only.
- 2) **Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) **All questions are compulsory**.
- 4) The number to the **right** indicates **full** marks.
- 5) Draw diagrams **wherever** necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any forensic medicine and toxicology syllabus. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.

SECTION “B” (40Marks)

2. Short Answer Questions (Any 5 out of 6)

(5 x 6 = 30)

- a) b) c) d) e) f)

(1 x 10 = 10)

3. Long Answer Questions (Any 1 out of 2)

- a) b)

SECTION “C” (40Marks)

(5 x 6 = 30)

4 Short answer questions (One short note should be from **AETCOM3.2** is compulsory) (Any 5 out of 6)

(1 x 10 = 10)

a) b) c) d) e) f)

5. Long Answer Questions (Any 1 out of 2)

a) b)

[ANNEXURE – 19A]

III/I MBBS Practical Mark's Structure MGMIHS

Applicable w.e.f October 2022 onwards examination

Subject: Forensic Medicine & Toxicology

Subject: Forensic Medicine& Toxicology													
Practical										Oral/Viva			Total
Seat No.	Medical Certificate of Cause of Death (MCCD)	Injury report	Survivor/ Accused of Sexual Assault report	Alcohol Intoxication Drunkenness report	Sickness/ Fitness certificate	Age/ Potency/Foetus Report	Weapon Report	Spots- • Bone-1 • Specimen-1 • Poison-2 • X-ray/ Photograph/ Instrument/ Document-1	Total	Forensic Pathology, Clinical Forensic Medicine	Medical Jurisprudence and Toxicology	Total	Practical & Oral (I+ L)
	A	B	C	D	E	F	G	H	I	J	K	L	M
Max Marks	10	10	10	10	10	10	10	2 X 5= 10	80	10	10	20	100

Suggestions:

1. It is suggested that minimum 2 exercises can be kept as actual case or in simulated environment.
2. In the spots - minimum 2 spots can be kept as OSPE stations.

Resolution No. 4.22 of Academic Council (AC-51/2025):

Resolved to adopt the NMC new competencies for UG MBBS Pathology, Pharmacology, Microbiology and FMT (teaching hours in 2nd & 3rd year)
Admission batch 2024.

[ANNEXURE-44A, 44B, 44C, 44D1 & 44D2].

Annexure-44D1 of AC-51/2025

FORENSIC MEDICINE & TOXICOLOGY (CODE: FM)

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
FORENSIC MEDICINE & TOXICOLOGY (Topics = 14, Competencies = 158)							
Topic 1: Introduction to forensic medicine basics of legal procedure. Number of competencies: (09) Number of competencies that require certification: (NIL)							
FM1.1	Define Forensic medicine, Clinical Forensic Medicine, Forensic Pathology, State Medicine, Legal Medicine and Medical Jurisprudence	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM1.2	Describe history of Forensic Medicine	K	KH	N	SDL	Written/ Viva voce	
FM1.3	Describe legal competencies including Bharatiya Nagarika Suraksha Sanhita (BNSS), Bharatiya Nyay Sanhita (BNS) Bharatiya Sakshya Adhiniyam (BSA), Protection of Children from Sexual Offences Act (POCSO) Civil and Criminal Cases, Inquest (Police Inquest and Magistrate's Inquest), Cognizable and Non-cognizable offences	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM1.4	Describe Courts in India and their powers: Supreme Court, High Court, Sessions court, Magistrate's Court, Labour Court, Family Court, Executive Magistrate Court and Juvenile Justice Board	K	KH	N	SDL/Moot Court	Written/ Viva voce	
FM1.5	Describe Court competencies including issue of Summons, conduct money, types of witnesses, recording of evidence oath, affirmation, examination in chief, cross examination, re-examination and court questions, recording of evidence & conduct of doctor in witness box	K	KH	Y	LGT, SGT/ Practicals / Seminars, Moot Court	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
FM1.6	Describe Offenses in Court including Perjury; Court strictures vis-a-vis Medical Officer	K	KH	N	SDL	Written/ Viva voce	
FM1.7	Describe Dying Declaration & Dying Deposition	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM1.8	Describe the latest decisions/notifications/resolutions/circulars/standing orders related to medico-legal practice issued by Courts/Government authorities etc.	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM1.9	Describe the importance of documentation in medical practice in regard to medico legal examinations, Medical Certificates and medico legal reports especially - maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centres. - maintenance of medico-legal register like accident register. - documents of issuance of wound certificate - documents of issuance of drunkenness certificate. - documents of issuance of sickness and fitness certificate. - documents for issuance of death certificate. -documents of Medical Certification of Cause of Death - Form Number4 and 4A - documents for estimation of age by physical, dental and radiological examination and issuance of certificate	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce/Direct observation	
Topic 2: Forensic Pathology		Number of competencies: (28)			Number of competencies that require certification : (1)		
FM2.1	Select appropriate cause of death in a particular scenario by referring ICD 11 code	K	KH	Y	LGT,SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.2	Write a correct Medical Certificate of Cause of Death (MCCD) certificate as per ICD 11 document	S	SH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce/ Direct observation /O SPE	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
FM2.3	Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brainstem Death	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.4	Describe salient features of the Organ Transplantation and The Human Organ Transplant (Amendment) Act 2011 and discuss ethical issues regarding organ donation	K	KH	Y	LGT, SGT/ Practicals / Seminars/video demo.	Written/ Viva voce	
FM2.5	Describe and discuss issues related to sudden natural deaths	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.6	Describe and discuss natural and unnatural deaths	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.7	Discuss moment of death, modes of death – coma, asphyxia and syncope	K	KH	Y	LGT, SGT/ Practicals / Seminars/ Video demo.	Written/ Viva voce	
FM2.8	Describe and discuss suspended animation	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.9	Describe and discuss post-mortem changes including signs of death, cooling of body, post-mortem lividity, rigor mortis, cadaveric spasm, cold stiffening and heat stiffening	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP/Video Demo.	Written/Viva voce/OSPE	
FM2.10	Describe putrefaction, mummification, adipocere and maceration	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/Viva voce/OSPE	
FM2.11	Discuss estimation of time since death	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/ Viva voce/OSPE	
FM2.12	Introduction to mortuary setup and minimum requirement for conducting post-mortem examination and Embalming techniques	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.13	Describe and discuss autopsy competencies including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/Viva voce/OSPE	
FM2.14	Describe the legal requirements to conduct post-mortem examination and competencies to conduct medico-legal post-	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/Viva voce/OSPE	

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
	mortem examination						
FM2.15	Describe and discuss obscure autopsy and Virtopsy	K	KH	Y	LGT, SGT/ Practicals / Seminars, Video Demo.	Written/ Viva voce	
FM2.16	Describe and discuss examination of clothing, preservation of viscera on post-mortem examination for chemical analysis and other medico-legal purposes, post-mortem artefacts	K	KH	Y	LGT, SGT/ Practicals / Seminars , Autopsy, DOAP, Video Demo.	Written/ Viva voce/OSPE	
FM2.17	Describe the clinical features, post-mortem finding and medico legal aspects of injuries due to physical agents like heat (heat-hyper-pyrexia, heat stroke, sun stroke, heat exhaustion/prostration, heat cramps [miner's cramp] or cold (systemic and localized hypothermia, frostbite, trench foot, immersion foot)	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy ,DOAP	Written/ Viva voce	
FM2.18	Describe types of injuries, clinical features, patho-physiology, post-mortem findings and medico-legal aspects in cases of burns, scalds, lightening, electrocution and radiations	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/ Viva voce/OSPE	
FM2.19	Describe and discuss clinical features, post-mortem findings and medico-legal aspects of death due to starvation and neglect	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM 2.20	Describe special protocols for conduction of medico-legal autopsies in cases of death in custody or following violation of human rights as per National Human Rights Commission Guidelines	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/ Viva voce/OSPE	
FM2.21	Describe and discuss examination of mutilated bodies or fragments, charred bones and bundle of bones	K	KH	Y	LGT, SGT/ Practicals / Seminars, DOAP	Written/ Viva voce/OSPE	
FM2.22	Describe and discuss exhumation	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM2.23	Crime Scene Investigation: Describe and discuss the objectives of crime scene visit, the duties & responsibilities of doctors on crime scene and the reconstruction of sequence of events after crime scene investigation	K	KH	N	SDL	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
FM2.24	Investigation of anaesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences	K	KH	N	SDL	Written/ Viva voce	
FM2.25	Demonstrate professionalism while conducting autopsy in medico legal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	A, C	KH/SH	Y	LGT, SGT/ Practicals / Seminars, DOAP	Written/ Viva voce/ OSPE	
FM2.26	Demonstrate ability to work in a team for conduction of medico-legal autopsies in cases of death following alleged negligence medical dowry death, death in custody or following violation of human rights as per National Human Rights Commission Guidelines on exhumation	A	KH	Y	LGT, SGT/ Practicals / Seminars, DOAP	Written/ Viva voce/ OSPE	
FM2.27	Demonstrate ability to exchange information by verbal, or nonverbal communication to the peers, family members, law enforcing agency and judiciary	A and C	KH	Y	LGT, SGT/ Practicals / Seminars, DOAP	Written/ Viva voce	
FM2.28	Demonstrate ability to use local resources whenever required like in mass disaster situations	A and C	KH	Y	LGT, SGT/ Practicals /Seminars	Written/ Viva voce	
Topic 3: Mechanical asphyxia		Number of competencies: (04)			Number of competencies that require certification : (NIL)		
FM3.1	Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxial deaths	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/ Viva voce/OSPE	
FM3.2	Describe and discuss different types of hanging and strangulation including clinical findings, causes of death, post-mortem findings and medico-legal aspects of death due to hanging and strangulation including examination, preservation and dispatch of ligature material	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy DOAP	Written/ Viva voce/OSPE	
FM3.3	Describe and discuss patho-physiology, clinical features, post-mortem findings and medico-legal aspects of traumatic asphyxia, obstruction of nose & mouth, suffocation and sexual asphyxia	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/ Viva voce/OSPE	

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
FM3.4	Describe and discuss types, patho-physiology, clinical features, postmortem findings and medico-legal aspects of drowning	K	KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy, DOAP	Written/Viva voce/OSPE	
Topic 4: Clinical forensic medicine – identification		Number of competencies: (05)		Number of competencies that require certification : (NIL)			
FM4.1	Define and describe Corpus Delicti, establishment of identity of living persons including race, sex, religion, complexion, stature.	K	KH	Y	LGT, SGT/ Practicals / Seminars , Bedside clinic, DOAP	Written/Viva voce/ skill assessment	
FM4.2	Discuss teeth-eruption, decay, bite marks, and medico-legal aspects of teeth.	K	KH	Y	LGT, SGT/ Practicals / Seminars , Bedside clinic, DOAP	Written/Viva voce/ skill assessment	
FM4.3	Discuss age determination using morphology, bones- ossification centers and medico-legal aspects of age.	K	KH	Y	LGT, SGT/ Practicals / Seminars , Bedside clinic, DOAP	Written/Viva voce/ skill assessment	
FM 4.4	Describe and discuss identification of criminals, unknown persons, dead bodies from the remains-hairs, fibers, teeth, anthropometry	K	KH	Y	LGT, SGT/ Practicals / Seminars , Bedside clinic, DOAP	Written/Viva voce/ skill assessment	
FM4.5	Dactylography, footprints, scars, tattoos, poroscopy and superimposition	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
Topic 5: Clinical forensic medicine - mechanical injuries and wounds		Number of competencies: (06)		Number of competencies that require certification : (NIL)			
FM5.1	Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self- inflicted/fabricated wounds and their medico-legal aspects	K	KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, DOAP	Written/Viva voce/OSCE	
FM5.2	Define injury, assault & hurt. Describe Bharatiya Nyay Sanhita (BNS) pertaining to injuries	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	

FM5.3	Describe accidental, suicidal and homicidal injuries. Describe simple, grievous and dangerous injuries. Describe ante-mortem and post-mortem injuries	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM5.4	Describe healing of injury and fracture of bones with its medico-legal importance	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	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
FM5.5	Describe factors influencing infliction of injuries and healing, examination and certification of wounds and wound as a cause of death: Primary and Secondary	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM5.6	Describe and discuss different types of weapons including dangerous weapons and their examination	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
Topic 6: Clinical forensic medicine - firearm injuries		Number of competencies: (02)		Number of competencies that require certification : (NIL)			
FM6.1	Describe different types of firearms including structure and components. Along with description of ammunition propellant charge and mechanism of fire-arms, different types of cartridges and bullets and various terminology in relation of firearm – caliber, range, choking	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM6.2	Describe and discuss wound ballistics-different types of firearm injuries, blast injuries and their interpretation, preservation and dispatch of trace evidences in cases of firearm and blast injuries, various tests related to confirmation of use of firearms	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, DOAP	Written/Viva voce/OSCE	
Topic 7: Clinical forensic medicine - regional injuries		Number of competencies: (02)		Number of competencies that require certification : (NIL)			
FM7.1	Describe and discuss regional injuries to head(Scalp wounds, fracture skull, intracranial hemorrhages, coup and countercoup injuries), neck, chest, abdomen, limbs, genital organs, spinal cord and Skeleton	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic or autopsy, DOAP	Written/ Viva voce/ OSCE/OSPE	

FM7.2	Describe and discuss injuries related to fall from height and vehicular injuries – Primary and Secondary impact, Secondary injuries, crush syndrome, railway spine	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic or autopsy, DOAP	Written/ Viva voce/ OSCE/OSPE	
Topic 8: Clinical forensic medicine - sexual offences		Number of competencies: (16)			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
FM8.1	Describe various sections of BNS and BNSS related to definition of rape, medical examination of rape victim/ survivor and accused of rape, police information by the doctors and medical care with recent amendments notified till date (i.e. Sections 63 BNS, 200 BNS, 397 BNSS & 184 BNSS, 52 BNSS), and recent amendments notified till date, sections 3 to 12, 27 and 41 of Protection of Children from sexual offences (POCSO) Act.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Video Demo.	Written/ Viva voce/ OSCE/OSPE	
FM8.2	Describe and discuss the examination of the survivor of an alleged case of rape, and the preparation of report, framing the opinion and preservation and dispatch of trace evidences in such cases	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, DOAP, Video Demo.	Written/ Viva voce/ OSCE	
FM8.3	Describe and discuss informed consent in sexual intercourse. Describe and discuss histories of gender and sexuality-based (sexual orientation) identities and rights in India. Describe history of decriminalization of ‘adultery’ and consensual adult homosexual sexual behaviour. Describe sexual offences with its medicolegal significance- <ul style="list-style-type: none"> ➤ Forced/ non-consensual penetrative anal sex ➤ Forced/ non-consensual oral sex ➤ Sexual acts with animals/ bestiality/ zoophilia ➤ Forced/ non-consensual insertion of fingers or objects Forced/ non-consensual touching or groping or disrobing (‘indecent assault’).	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	

FM 8.4	Define and discuss infanticide, foeticide and stillbirth	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.5	Define and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP of ossification centres, Hydrostatic test, Sudden infant death syndrome and Munchausen's syndrome by proxy.	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.6	Describe the difference between paraphilia and paraphilic disorder. Describe paraphilic disorder as per the latest guidelines of DSM and ICD and describe medico-legal implications of paraphilic disorder by referring scientific literature and legal justification (if any). Describe and discuss various paraphilias in the context of informed consent during any sexual interaction.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.7	Describe legitimacy and its medico legal importance. Describe and discuss how 'signs' of virginity (so called 'virginity test', including finger tests (on female genitalia) are unscientific, inhuman and discriminatory. Describe and discuss how to appraise the courts about unscientific basis of these tests if court orders it.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.8	Discuss the medico legal aspects of pregnancy and delivery, signs of pregnancy, precipitate labour, superfoetation, superfecundation and signs of recent and remote delivery in living and dead	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	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
FM8.9	Discuss disputed paternity and maternity	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.10	Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC&PNDT) - Prohibition of Sex Selection Act 2003 and Domestic Violence Act 2005 with Amendments	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM8.11	Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation. Discuss the causes of impotence and sterility in male and female	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	

Topic 10: Medical jurisprudence (medical law and ethics)		Number of competencies: (29)			Number of competencies that require certification : (NIL)		
FM10.1	Describe Medical Ethics and explain its historical emergence	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.2	Describe the Indian Medical Register	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.3	Describe the functions and role of National Medical Commission and State Medical Councils	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.4	Describe the Code of Medical Ethics 2002 conduct, Etiquette and Ethics in medical practice and unethical practices & the dichotomy	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.5	Rights/privileges of a medical practitioner, penal erasure, infamous conduct, disciplinary Committee, disciplinary competencies, warning notice and penal erasure	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.6	Describe the Laws in Relation to medical practice and the duties of a medical practitioner towards patients and society	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.7	Describe and discuss ethics related to HIV patients and legal aspects as per The Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (Prevention and Control) Act, 2017.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.8	Describe the Consumer Protection Act-2019 (Medical Indemnity Insurance, Civil Litigations and Compensations)	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.9	Describe the medico - legal issues in relation to family violence, violation of human rights, NHRC and doctors	K	KH	N	SDL	Written/ Viva voce	
FM10.10	Describe communication between doctors, public and media	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.11	Describe and discuss euthanasia and Do not Resuscitate (DNR)	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.12	Discuss legal and ethical issues in relation to stem cell research	K	KH	N	SDL	Written/ Viva voce	

FM10.13	Describe social aspects of Medico-legal cases with respect to survivors of assault, rape, attempted suicide, homicide, domestic violence, dowry- related cases	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.14	Describe & discuss the challenges in managing medico-legal cases including development of skills in relationship management – Human behavior, communication skills, conflict resolution Techniques	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.15	Describe the principles of handling pressure – definition, types, causes, sources and skills for managing the pressure while dealing with medico-legal cases by the doctor	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.16	Describe and discuss Bioethics	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.17	Describe and discuss ethical Principles: Respect for autonomy, non-maleficence, beneficence & justice	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.18	Describe and discuss medical negligence including civil and criminal negligence, contributory negligence, corporate negligence, vicarious liability, Res Ipsa Loquitur, prevention of medical negligence and defenses in medical negligence litigations	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.19	Define Consent. Describe different types of consent and ingredients of informed consent. Describe the rules of consent and importance of consent in relation to age, emergency situation,	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
	mental illness and alcohol intoxication						
FM10.20	Describe therapeutic privilege, Malingering, therapeutic Misadventure, Professional Secrecy, Human Experimentation	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.21	Describe Products liability and Medical Indemnity Insurance	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.22	Explain Oath – Hippocrates, Charaka and Sushruta and procedure for administration of Oath.	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	

FM10.23	Describe the modified Declaration of Geneva and its relevance	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.24	Enumerate rights, privileges and duties of a Registered Medical Practitioner. Discuss doctor- patient relationship: professional secrecy and privileged communication	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.25	Clinical research & Ethics Discuss human experimentation including clinical trials	K	KH	N	SDL	Written/ Viva voce	
FM10.26	Discuss the constitution and functions of ethical committees	K	KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.27	Describe and discuss Ethical Guidelines for Biomedical Research on Human Subjects & Animals	K	KH	N	SDL	Written/ Viva voce	
FM10.28	Demonstrate respect to laws relating to medical practice and Ethical code of conduct prescribed by National Medical Commission and rules and regulations prescribed by it from time to time	A and C	SH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM10.29	Demonstrate ability to conduct research in pursuance to guidelines or research ethics	A and C	KH/SH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
Topic 11: Forensic psychiatry		Number of competencies: (06)			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
FM11.1	Classify common mental illnesses including post-traumatic stress disorder (PTSD)	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM11.2	Define, classify and describe delusions, hallucinations, illusion, lucid interval and obsessions with exemplification	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM11.3	Describe Civil and criminal responsibilities of a mentally ill person	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM11.4	Differentiate between true mental illness from feigned mental illness	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	

FM11.5	Describe & discuss Delirium tremors	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM11.6	Describe the Indian Mental Health Act, 2017 and recent amendments with special reference to admission, care and discharge of a mentally ill person	K	K/KH	N	SDL	Written/ Viva voce	
Topic 12: Forensic laboratory investigation, recent advances and trace evidences		Number of competencies: (06)			Number of competencies that require certification : (NIL)		
FM12.1	Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids (blood, urine, semen, faeces saliva), Skin, Nails, tooth pulp, vaginal smear, viscera, skull, specimen for histo-pathological examination, blood grouping, HLA Typing and DNA Fingerprinting. Describe Locard's Exchange Principle	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM12.2	Describe the methods of sample collection, preservation, labelling, dispatch, and interpretation of reports	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM12.3	Cyber Forensic in relation to Privacy of Medical Documents	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM12.4	Demonstrate professionalism while sending the biological or trace evidences to Forensic Science laboratory, specifying the required tests to be carried out, objectives of preservation of evidences sent for examination, personal discussions on interpretation of findings	A and C	KH/SH	Y	LGT, SGT/ Practicals / Seminars, DOAPs	Viva voce / OSPE	
FM12.5	Demonstrate the professionalism while preparing reports in medico legal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	A and C	SH	Y	LGT, SGT/ Practicals / Seminars	OSPE/Viva voce	

FM12.6	Enumerate the indications and describe the principles and appropriate use for: - DNA profiling -Facial reconstruction - Polygraph (Lie Detector) - Narcoanalysis, - Brain Mapping, Digital autopsy, - Virtual Autopsy, Imaging technologies	K	K/KH	N	SDL	Written/ Viva voce	
Topic 13: Toxicology		Number of competencies: (21)			Number of competencies that require certification : (NIL)		
FM13.1	Describe the history of Toxicology	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM13.2	Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM13.3	Describe the various types of poisons, Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead	K	K/KH	Y	LGT, SGT/ Practical / Seminars	Written/viva voce	
FM13.4	Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/ Viva voce	
FM13.5	Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis	K	K/KH	Y	LGT, SGT/ Practical / Seminars, Autopsy, DOAP	Written/Viva voce/OSPE	
FM13.6	Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India	K	K/KH	Y	LGT, SGT/ Practical / Seminars, Bed side clinic, DOAP	Written/Viva voce/OSCE	
FM13.7	Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids	K	K/KH	Y	LGT, SGT/ Practical / Seminars, Bed side clinic, DOAP	Written/Viva voce/OSCE	
FM13.8	Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination	K	K/KH	Y	LGT, SGT/ Practical / Seminars, Bed side clinic, DOAP	Written/Viva voce/OSCE	

FM13.9	Describe the procedure of intimation of suspicious cases or actual cases of foul play to the police, maintenance of records, preservation and dispatch of relevant samples for laboratory analysis.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/Viva voce	
FM13.10	Describe the general principles of Analytical Toxicology and give a brief description of analytical methods available for toxicological analysis: Chromatography – Thin Layer Chromatography, Gas Chromatography, Liquid Chromatography and Atomic Absorption Spectroscopy	K	K/KH	Y	LGT, SGT/ Practicals / Seminars	Written/Viva voce	
FM13.11	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to: Caustics Inorganic – sulphuric, nitric, and hydrochloric acids; Organic- Carbolic Acid (phenol), Oxalic and acetylsalicylic acids	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.12	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to Phosphorus, Iodine, Barium	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.13	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to Arsenic, lead, mercury, copper, iron.	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.14	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to Ethanol, methanol, ethylene glycol Local Made Liquor and Hooch Tragedy	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.15	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to Organophosphates, Carbamates, Organochlorines, Pyrethroids, Paraquat, Aluminium and Zinc phosphide	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	

FM13.16	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to Ammonia, carbon monoxide, hydrogen cyanide & derivatives, methyl isocyanate, tear (riot control) gases	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.17	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to: i. Antipyretics – Paracetamol, Salicylates ii. Anti-Infectives (Common antibiotics – an overview) iii. Neuropsychotoxicology Barbiturates, benzodiazepines, phenytoin, lithium, haloperidol, neuroleptics, tricyclics	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.18	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, competencies of enhanced elimination with regard to: iv. Narcotic Analgesics, Anaesthetics, and Muscle Relaxants v. Cardiovascular Toxicology Cardio toxic plants – oleander, Cerbera odollam, aconite, digitalis vi. Gastro- Intestinal and Endocrinal Drugs – Insulin	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Bed side clinic, Autopsy, DOAP	Written/Viva voce/OSCE	
FM13.19	Describe features and management of Snake bite, scorpion sting, bee and wasp sting and spider bite	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy	Written/ Viva voce	
FM13.20	Describe features and management of abuse/poisoning of Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent, Mushroom Poisoning, Food Poisoning	K	K/KH	Y	LGT, SGT/ Practicals / Seminars, Autopsy	Written/ Viva voce	
FM13.21	Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	K	K/KH	N	SDL	Written/ Viva voce	

Topic 14: Skills in forensic medicine & toxicology		Number of competencies: (20)			Number of competencies that require certification: (5)		
FM14.1	Examine and prepare Medico-legal report of an injured person with different etiologies in a simulated/ supervised environment	S	SH/P	Y	Bedside clinic (ward/casualty), SGT/ Practicals / Seminars	Log book/ Skill station/Viva voce / OSCE	3
FM14.2	Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment	S	SH	Y	Bedside clinic (ward/casualty), SGT/ Practicals / Seminars	Log book/ Skill station/Viva voce / OSCE	
FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	S	SH	Y	Bedside clinic, SGT/ Practicals / Seminars, DOAP	Skill lab/ Viva voce	
FM14.4	Conduct and prepare report of estimation of age of a person for medico-legal and other purposes & prepare medico-legal report in a simulated/ supervised environments	S	KH	Y	SGT/ Practicals / Seminars, Demonstration	Log book/ Skill station/Viva voce / OSCE	
FM14.5	Examine and prepare Medical Certificate Of Cause Of Death (MCCD)in a simulated/ supervised environment	S	SH/P	Y	Bedside clinic (ward/casualty), SGT/ Practicals / Seminars	Log book/ Skill station/Viva voce / OSCE	3
FM14.6	Conduct & prepare post-mortem examination report of varied etiologies (at least 15) in a simulated/ supervised environment	S	KH	Y	SGT/ Practicals / Seminars, Autopsy, DOAP	Log book/ Skill station/Viva voce / OSCE	3
FM14.7	Demonstrate the correct technique to perform and identify ABO &RH blood group of a person	S	SH	Y	SGT/ Practicals / Seminars, DOAP	Log book/Skill station/Viva voce	
FM14.8	Demonstrate examination of & present an opinion after examination of skeletal remains in a simulated/ supervised environment	S	SH	Y	SGT/ Practicals / Seminars, DOAP	Log book/Skill station/Viva voce	
FM14.9	Demonstrate ability to identify & prepare medico legal inference from specimens obtained from various types of injuries e.g. contusion, abrasion, laceration, firearm wounds, burns, head injury and fracture of bone	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/Skill station/Viva voce/ OSPE	

FM14.10	To identify & describe weapons of medico legal importance which are commonly used e.g. lathi, knife, kripa, axe, gada, gupta, farsha, dagger, bhalla, razor & stick. Able to prepare report of the weapons brought by police and to give opinion regarding injuries present on the person as described in injury report/ PM report so as to connect weapon with the injuries. (Prepare injury report/ PM report must be provided to connect the weapon with the injuries)	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/Skill station/Viva voce/ OSPE	
FM14.11	Describe the contents and structure of bullet and cartridges used & to provide medico- legal interpretation from these	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/ Skill	
FM14.12	To estimate the age of foetus by post-mortem examination	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Theory/ Clinical assessment/ Viva voce	
FM14.13	To examine & prepare report of an alleged accused person in cases of various sexual offences in a simulated/ supervised	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/ Skill station/Viva voce /	3
	environment. Demonstrate an understanding of framing the opinion, preservation and dispatch of trace evidences in such cases. Describe and discuss personal opinions and their impact on such examinations and the need for objectivity/ neutrality to avoid prejudice influencing the case.					OSCE	
FM14.14	To examine & prepare medico-legal report on an alleged victim/ survivor of various sexual offences in a simulated/ supervised environment. (Guidelines and protocols of Medico Legal Care for Survivors/ Victims of sexual violence; Ministry of Health and Family Welfare, GOI- with latest modifications if any). Demonstrate an understanding of framing the opinion, preservation and dispatch of trace evidences in such cases. Describe and discuss sympathetic/ empathetic examination and interview of victims/ survivors of sexual assault, including presence of trusted adult figure (person) in cases of minor victims/ survivors.	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/ Skill station/Viva voce / OSCE	3
FM14.15	To examine & prepare medico-legal report of drunk person in a simulated/ supervised environment	S	KH	Y	SGT/ Practicals / Seminars, Bed side clinic, DOAP	Log book/ Skill station/Viva voce / OSCE	

FM14.16	To identify & draw medico-legal inference from common poisons e.g. dhatura, castor, cannabis, opium, aconite copper sulphate, pesticides compounds, marking nut, oleander, Nux vomica, abrus seeds, Snakes, capsicum, calotropis, lead compounds & tobacco.	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/ Viva voce	
FM14.17	To examine & prepare medico-legal report of a person in police, judicial custody or referred by Court of Law and violation of human rights as requirement of NHRC, who has been brought for medical examination	S	KH	Y	SGT/ Practicals / Seminars, DOAP	Log book/ Skill station/Viva voce / OSCE	
FM14.18	To record and certify dying declaration in a simulated/ supervised environment	S	KH	Y	SGT/ Practicals / Seminars, Role Play, Bed side clinic DOAP	Log book/ Skill station/Viva voce /OSCE	
FM14.19	To collect, preserve, seal and dispatch exhibits for DNA-Fingerprinting using various formats of different laboratories.	S	KH	Y	LGT , SGT/ Practicals / Seminars,	Log book/ Skill station/Viva voce	
FM14.20	To give expert medical/ medico-legal evidence in Court of law	S	KH	Y	LGT, SGT/ Practicals / Seminars, DOAP, role play, Court Visits	Log book/ Viva voce/OSCE	

AETCOM Modules teaching and assessment

The tables below show the suggested AETCOM blueprinting for various university papers and for module leader/in-charge for coordinating Module teaching. Each module leader/in-charge should select a multi-subject team and then the module is taught by various members of the team. The module teaching learning activities should be planned and conducted by this team.

Assessment: All internal and University exams must have one question/application based question on AETCOM in each theory paper (5%) and it should be assessed in various components of practical/clinical exams.

AETCOM Phase I		
Subject	Paper	Module number
Anatomy	Paper 1	1.5
	Paper 2	1.4 foundations of communications
Physiology	Paper 1	1.2
	Paper 2	1.3
Biochemistry	Paper 1	1.1 <ul style="list-style-type: none"> Enumerate and describe professional qualities and roles of a physician Describe and discuss commitment to lifelong learning as an important part of physician growth
	Paper 2	1.1 <ul style="list-style-type: none"> Describe and discuss the role of a physician in health care system Identify and discuss physician's role and responsibility to society and the community that she/ he serves

AETCOM Phase II		
Subject	Paper	Module number
Microbiology	Paper 1	2.1
	Paper 2	2.8
Pharmacology	Paper 1	2.2, 2.3
	Paper 2	2.5
Pathology	Paper 1	2.4
	Paper 2	2.7

AETCOM Phase III part I		
Subject	Paper	Module number
Ophthalmology	Single paper	3.1
ENT	Single paper	3.3
Forensic Medicine & Toxicology	Single paper	3.4
Community Medicine	Paper 1	3.2
	Paper 2	3.5

AETCOM Phase III part 2		
Subject	Competency Number	Competency
Medicine and Allied Subjects, integration	Paper 1	4.1
	Paper 2	4.3
Surgery and Allied Subjects,	Paper 1	4.4
	Paper 2	4.5, 4.6
Obstetrics and Gynecology	Paper 1	4.2, 4.7
	Paper 2	4.8
Pediatrics	Single paper	4.9

Resolution No. 4.21 of Academic Council (AC-51/2025): Resolved to approve list of integrated topics from each subject (UG MBBS Pathology, Pharmacology Microbiology and FMT) Admission batch 2024. It was further resolved that these integrated topics need to be displayed on website and distributed to the students as they are part of theory and practical assessment [ANNEXURE-43A, 43B, 43C, 43D & 43E].

Annexure-43D of AC-51/2025

MGM MEDICAL COLLEGE, KAMOTHE
NAVI MUMBAI
DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY
Topics Identified For Integration(2024)

Sr. No.	Date	Comp. No.	Competency	Topic for Integration	Sub – Topic needed	Department for Integration
1		FM1.9	Describe the importance of documentation in medical practice in regard to medico-legal examinations, Medical Certificates and medico-legal reports especially - Maintenance of patient case records, dischargesummary, prescribed registers to be maintained in HealthCenters. - Maintenance of medico-legal register like accident registers. - Documents of issuance of woundcertificate - Documents of issuance of drunkennesscertificate. - Documents of issuance of sickness and fitnesscertificate. - Documents for issuance of death certificate. -documents of Medical Certification of Cause of Death - Form Number4 and4A documents for estimation of age by physical, dental and radiological examination and issuance ofcertificate	Wound Certificate Sickness/fitness certificate Estimation of age by Physical, dental & radiological examination	- - -	General Surgery, General Medicine, Pediatrics
1		FM2.1 MPJ	Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brainstem Death	Somatic /Clinical/Cellular & Brain death, Cortical death	-	Pathology
1		FM2.2 MPJ	Describe and discuss natural and unnatural deaths	Cell death, Nuclear death(Apoptosis, Necrosis cell death)	-	Pathology
1		FM2.3 MPJ	Describe and discuss issues related to sudden natural deaths	Molecular & cellular changes in sudden natural death	-	Pathology
1		FM2.5 MPJ	Discuss moment of death, modes of death - coma, asphyxia and syncope	Cellular changes seen in Asphyxia & syncope of coma	-	Psychiatry, Pathology
1		FM2.11 MPJ	Describe and discuss autopsy procedures including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination	Cellular changes seen in autopsy & post-mortem examination objective of Autopsy	-	Pathology
1		FM2.12 MPJ	Describe the legal requirements to conduct post-mortem examination and procedures to conduct medico-legal post-mortem examination	Autopsy cellular changes	-	Pathology

1		FM2.13 MPJ	Describe and discuss obscure autopsy	Cellular changes in post-mortem	-	Pathology
1		FM2.19	Investigation of anesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences	++	-	Anesthesiology, General Surgery
1		FM3.1	IDENTIFICATION Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age determination using morphology, teeth-eruption, decay, bite marks, bones-ossification centers, medico-legal aspects of age	Define and describe age determination sex determination using morphology , teeth eruption , decay, bite marks, bones-ossification centers, medico-legal aspects of age	-	Human Anatomy
1		FM3.20	Discuss disputed paternity and maternity		-	Obstetrics &Gynecolog
1		FM2.27	Define and discuss infanticide, foeticide and stillbirth	infanticide, foeticide and stillbirth	-	Pediatrics
1		FM2.28	Describe and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP session of ossification centers, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	Molecular and cellular changes of intrauterine death , sign of live birth , viability of foetus, age determination of foetus, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	-	Pediatrics, Human Anatomy
1		FM3.29	Describe and discuss child abuse and battered baby syndrome	child abuse and battered baby syndrome	-	Pediatrics
1		FM6.1	Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids (blood, urine, semen, faces saliva), Skin, Nails, tooth pulp, vaginal smear, viscera, skull, specimen for histo-pathological examination, blood grouping, HLA Typing and DNA Fingerprinting. Describe Locard's Exchange Principle	, blood grouping, HLA Typing and DNA Fingerprinting. Describe Locard's Exchange Principle	-	Pathology
1		FM8.1	Describe the history of Toxicology		-	Pharmacology
1		FM8.2	Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison	Poison toxins and management	-	Pharmacology
1		FM8.3	Describe the various types of poisons, Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead	Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead	-	Pharmacology

1		FM8.4	Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons	, Medico-legal aspects of poisons	-	Pharmacology
1		FM8.5	Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis	preservation and dispatch of viscera for chemical analysis	-	Pharmacology
1		FM8.6	Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India	general symptoms, principles of diagnosis and management of common poisons encountered in India	-	Pharmacology
1		FM8.7	Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids	Bedside clinic tests to detect poison/drug in a patient's body fluids	-	Pharmacology General Medicine
1		FM8.8	Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination	methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination	-	Pharmacology General Medicine
1		FM13.1	Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	-	General Medicine
1		FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	-	General Medicine
1		FM14.7	Demonstrate & identify that a particular stain is blood and identify the species of its origin	identify that a particular stain is blood and identify the species of its origin	-	Pathology, Physiology
1		FM14.8	Demonstrate the correct technique to perform and identify ABO & RH blood group of a person	correct technique to perform and identify ABO & RH blood group of a person	-	Pathology, Physiology
1		FM 14.9	Optic Injuries -	Grievous hurt- IPC - 319	-	Ophthalmology
1		FM 14.10	Human organ donation Act	Human organs /Corneal donation	-	Anatomy Ophthalmology

Professor & HOD
Dept. of Forensic Medicine & Toxicology
MGM Medical College, Kamothe

Distribution of Subject Wise Teaching Hours for Phase-2 MBBS

Subjects	Large group teaching	SGT/ Practicals/ Tutorials/ Seminars	Clinical Postings*	SDL	Total
Pathology	80	170	-	10	260
Pharmacology	80	170	-	10	260
Microbiology	75	143	-	10	228
Community Med (including FAP)	25	0	24	10	59
Forensic Medicine and Toxicology	12	25	-	08	45
Clinical Subjects	60		540	-	600
AETCOM	-	29	-	8	37
Sports, Yoga extra-curricular activities	-	-	-	32	32
Final total	332	537	564	88	1521

SGT: Small group teaching SDL: Self-directed learning

Pl. note: *Clinical postings shall be for 3 hours per day, Monday to Friday.

There will be 15 hours per week for all clinical postings.

Distribution of Subject Wise Teaching Hours for MBBS Phase-3, part 1

Subject	Large group teaching	SGT/ Practicals/ Tutorials/ Seminars	SDL	Total
Electives	0	156	0	156
Gen. Medicine	20	30	10	60
Gen Surgery	20	30	10	60
Obstetrics & Gynecology	20	30	10	60
Pediatrics	20	30	05	55
Forensic Medicine and Toxicology	35	65	20*	120
Community Med	50	80	20	150
FAP (Visits +log book submission)	-	26	10	36
Otorhinolaryngology (ENT)	30	50	20	100
Ophthalmology	30	50	20	100
Clinical posting*				593
AETCOM	0	19	12	31
Total	225	566	137	1521

*Out of this, 21 Hours (07 days x 03 hours) must be utilised for demonstration of post mortem examinations

Pl. note: *Clinical postings shall be for 3 hours per day, Monday to Saturday.

There will be 18 hours per week for all clinical postings.

Resolution No. 4.65 of Academic Council (AC-50/2024): Resolved to approve Continuous Internal Assessment Methods (FMT).

Annexure-80A of AC-50/2024

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY

Sr. No.	Roll No.	Name of Student	Formative Assessment Theory			Continuous Assessment Theory						Cumulative percent of Theory & Practical		
			1 st PCT Theory	2 nd PCT Theory	Prelims Theory Paper	Home assignment	Seminar	Continuous Class Test (LMS) At the end of lecture	Museum Study	Library assignment	Attendance Theory	Total	Percentage Theory (Minimum Cut off 40%)	Theory + Practical = 375 + 500= 875 (Minimum cut off 50%)
			100	100	100	10	10	25	10	10	10			
						Poster/ PPTs/ Essay/ Open book Exam	Seminar by students	MCQs/ One liner/ One word/ Picture based MCQs	Models/Charts/ Bones/ weapons/ Catalogue Write-up by students	Asked to submit Journal article summary written by student				

S/d
Professor & Head
Department of _____
Medical College
University
State/
U.T.

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY

Faculty: MBBS Year/Phase-

Date: dd/mm/yyyy

Sr. No.	Roll No.	Name of Student	Formative Assessment Practical			Continuous Internal Assessment Practical						
			1 st PCT Practical/ First Ward Leaving Examination	2 nd PCT Practical/ Second Ward Leaving Examination	Prelims Practical	Logbook (150)			Journal (Record book/Portfolio)	Attendance Practical	Total	Percentage Practical (Minimum Cut off 40%)
						Certifiable Skill based competencies (Through OSPE/OSCE/ Sports/Exercise/Other Scenario based question)	AETCOM competencies	SVL Lab activity				
			100	100	100	70	40	40	40	10	500	%
						Scenario based question will be given to student on medical, medicolegal certificate	AETCOM Sessions assessment by the facilitator combined marks will be granted to the students-	skill modules have to be prepared by each department (Preferably skill lab)				

S/d

Professor & Head

Department of _____

Medical College

University

State/

U.T.

Resolution No. 4.18 of Academic Council (AC-51/2025): Resolved to adopt the changes in University theory paper pattern as per new NMC guidelines for UG MBBS admission batch 2024 (inclusion of Clinical Scenario Based MCQs, questions on integrated syllabus, change of marks distributions) for Pathology, Microbiology Pharmacology and FMT [ANNEXURE-40A, 40B, 40C, 40D, 40E & 40F].

Annexure-40F of AC-51/2025

Suggested format for a Theory paper		
Duration-3 hours		100 marks
	Type of question/ Number of questions	Marks per question
Q No 1	Scenario based MCQ/ 10-20	1-2
Q No 2	Long essay question/ ONE	10-12
Q No 3	Reasoning Questions/ FIVE	3
Q No 4	Short notes (applied aspects)/ FOUR All four subparts related to six integrated topics if subject is part of integrated modules. However, if a subject has less competencies in integrated module than atleast 2 sub-parts from integrated modules.	4-5
Q No 5	Short notes / THREE	5-6
Q No 6	Short notes / FOUR (one subpart of 5 marks from AETCOM)	4-5

MFormative assessment pattern in the subject of Forensic Medicine and Toxicology (FMT) as outlined by NMC for batch 2024 onwards

1st Internal Assessment to be conducted in the Phase 2

Theory Portion

1. Introduction, general /history
2. Legal Procedure.
3. Identification
4. Medicolegal Autopsy.
5. Death and Changes after Death.
6. Impotence, Sterility and Sterilization.
7. Toxicology: General Considerations.
8. Corrosive Poisons.
9. Inorganic Irritants: Non-metallic Poisons.

Practical Portion

1. Age report
2. MCCD—certifications
3. Sickness/fitness certificate.
4. Potency certificate.
5. Spotters (Bone, Specimen, Poison, X ray, Photograph, Instrument, Document).
6. OSPE/OSCE

2nd Internal Assessment to be conducted in the Phase 3

Theory Portion

1. Injury: General Considerations and Biophysics.
2. Mechanical Injury & Injury: Medicolegal Considerations.
3. Firearm Injuries and Bomb Blast Injuries.
4. Road Traffic Accidents.
5. Violent Asphyxia.
6. Virginity, sexual Offenses and Perversions
7. Inorganic Irritants: Metallic Poisons.
8. Organic Irritants: Plants and Vegetables.
9. Organic Irritants: Animal Bites and stings
10. Pesticides.
11. Inebriant Poisons.

Practical Portion

1. Injury report
2. Weapon examination.
3. Examination of survivor / accused of sexual offence.
4. Drunkenness report.
5. Spotters (Bone, Specimen, Poison, X ray, Photograph, Instrument, Document).
6. OSPE/OSCE

Suggested format for a University and all internal Theory paper			
<i>Duration-3 hours 100 marks</i>			
Type of question/ Number of questions		Marks per question	Total marks
Q No 1	MCQ with at least 5 marks scenario based MCQ (Total 20)	1	20
Q No 2	One Long essay question	10	10
Q No 3	Five Reasoning Questions	3	15
Q No 4	Four Short notes (applied aspects) All four subparts related to six integrated topics if subject is part of integrated modules. However, if a subject has less competencies in integrated module than at least 2 sub-parts from integrated modules.	5	20
Q No 5	Three short notes	5	15
Q No 6	Four short notes (one compulsory question from AETCOM)	5	20
Total			100

Practical examination pattern for 1st and 2nd Internal examination

Practical examination pattern for 1st and 2nd Internal examination		
	Practical Heads	Marks
1	Total 4 Exercises. Each exercise marked 15. (4 exercises x 15 = 60)	60
2	Spotters (Bone, Specimen, Poison, X ray, Photograph, Instrument, Document) OSCE/OSPE	10
3	Continuous internal assessment (Journal, Log book, Home assignment, Seminar, Museum study, Library assignment etc.)	10
4	Viva voce I Forensic pathology & Clinical forensic Medicine	10
5	Viva voce II Medical jurisprudence & Toxicology	10
Total		100

Preliminary examination & Final examination

1. Theory (All syllabus)

(Theory examination Marks: 100 marks)

2. Practical

(Practical examination Marks: 100 marks)

Practical pattern for Preliminary examination & Final examination		
	Practical Heads	Marks
1	Medical certification of cause of death	10
2	Injury report	10
3	Survivor / accused of sexual assault report	10
4	Alcohol intoxication Drunkenness report	10
5	Sickness/Fitness certificate	10
6	Age report / Potency report	10
7	Weapon report	10
7	Spotters (Bone 1, Specimen 1, Poison 2, X ray/ Photograph / Instrument / Document 1) OSCE/OSPE	10
9	Viva voce I Forensic pathology & Clinical forensic Medicine	10
10	Viva voce II Medical jurisprudence & Toxicology	10
Total		100

Time: 1 Hour for all Exercises, 2 Minute each for each Spotter station.

Final Internal Assessment calculation

Note :-

- i. Separate internals calculated for the theory and Practical.*
- ii. IA of Forensic Medicine and Toxicology is divided as 25 marks in phase II and 75 marks in Phase III part I The final cumulative IA is out of 100 for theory and practical each.*
- iii. Learners must secure **at least 50% of the total marks (combined in theory and practical / clinical; and minimum 40% in theory and practical separately)** for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject*

Sr. No.	Examinations	Theory (100 each)	Practical (100 each)
1	1 st Internal Assessment to be conducted in the Phase 2	T1	P1
2	2 nd Internal Assessment to be conducted in the Phase 3	T2	P2
3	Preliminary examination to be conducted in the Phase 3	T3	P3

Final internal assessment out of 100	
Theory	Practical
$(T1 \times 0.25) + (T2 + T3 \times 0.375)$	$(P1 \times 0.25) + (P2 + P3 \times 0.375)$

- Humanities: to introduce learners to a broader understanding of the socio-economic framework and cultural context within which health is delivered through the study of humanities and social sciences.

3) Electives

Objectives: To provide the learner with opportunities:

- For diverse learning experiences.
- It is mandatory for learners to do an elective. The elective time shall not be used to make up for missed clinical postings, shortage of attendance or other purposes.
- Institutions will pre-determine the number and nature of electives, names of the supervisors, and the number of learners in each elective based on the local conditions, available resources and faculty.
- Electives on topics in areas such as Research methodology, Research ethics, Use of Artificial intelligence and computers in Health and Medical Education, Health Management, Health economics, Indian system of medicine, Medical photography /clinical photography, Global health, Evidence based medicine, Art and music, Physiotherapy, Nutrition, ethical use of technology including artificial intelligence etc. in medicine, Literary activities, etc. may be provided by the college/ institution.
- It shall be preferable that elective choices are made available to the learners in the beginning of the academic year.
- The learner must submit a learning log book based on both blocks of the electives.
- 75% attendance in the electives and submission of log book maintained during electives is required for eligibility to appear in the University MBBS examination/ NExT.
- Institutions may use part of this time for strengthening basic skill certification.

4) Attitude, Ethics and Communication Module (AETCOM)

Objectives of the programme: At the end of the programme, the learner must demonstrate ability to:

Item 05 of BOS : Format for Forensic Medicine University theory and Practical Examination
CBME batch

Resolution No.3.24 of Academic Council (AC-42/2022): Resolved to
approve the format for Forensic Medicine University theory and practical
examination CBME batch. [ANNEXURE – 19A, 19B, 19C]



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410209

Tel 022-27432471, 022-27432994, Fax 022-27431094

E-mail- registrar@mgmuhs.com Website : www.mgmuhs.com

