

**Subject name:** - Forensic Medicine and Toxicology

**Subject code:** HomUG-FMT

**Index**

<b>S. No</b>	<b>Description</b>	<b>Page Number</b>
1.	Preamble	2
2.	Course Outcomes (CO)	2-3
3.	Course Content and Term –wise Distribution	3
4.	Teaching Hours	4-6
5.	Content Mapping	7-23
6.	Teaching Learning Methods	23
7.	Details of Assessment	43-49
8.	List of Recommended Books	50
9.	List of Contributors	50

## **1. Preamble**

Forensic Medicine and Toxicology encompass a multifaceted understanding of the medical, legal, and medico-legal obligations incumbent upon physicians, alongside a profound comprehension of medical ethics, decorum, and the toxicological ramifications of poisons. This field intersects with the elucidation of symptoms associated with homeopathic remedies. It is imperative for every registered Homoeopathic medical practitioner, whether practicing privately or within governmental institutions, to undertake medico-legal examinations as mandated by statute. In the current landscape characterized by burgeoning consumerism in medical services, familiarity with laws pertinent to medical practice, doctrines of medical negligence, and ethical codes assumes paramount importance. Practitioners must be cognizant of their medico-legal responsibilities, adept at making astute observations, drawing logical inferences, and arriving at significant conclusions during investigations into criminal matters and associated medico-legal intricacies.

Furthermore, proficiency in identifying, diagnosing, and studying the management protocols of both acute and chronic poisonings is indispensable. Decisions regarding treatment and referral should be judiciously made, considering the prevailing circumstances and severity of the condition, thereby ensuring timely intervention. Moreover, an understanding of the medico-legal dimensions of poison-related incidents is crucial.

Additionally, recognizing that the toxicological manifestations of poisons may bear resemblance to either the proving or clinical symptoms of certain Homoeopathic remedies underscoring the importance of integration between these disciplines. Such integration not only sheds light on the evolving drug profiles but also enhances comprehension of toxicological and therapeutic principles.

## **2. Course outcomes**

At the end of BHMS II course in Forensic Medicine and Toxicology, the student shall -

- i. Identify, examine and prepare reports / certificates in medico-legal cases/situations in accordance with the law of land.
- ii. Demonstrate awareness of legal/court procedures applicable to medico legal/medical practice
- iii. Acquire knowledge in Forensic medicine and recognize its scope and limitations in Homoeopathic practice
- iv. Be conversant with the code of ethics, etiquette, duties and rights of medical practitioners' profession towards patients, profession, society, state and humanity at large; infamous conduct, medical negligence, and punishment on violation of the code of ethics.
- v. Be able to identify poisons/poisoning, and management of poisoning within the scope of homoeopathy.

- vi. Develop knowledge of Materia Medica by application of knowledge gained by the study of Toxicology
- vii. Develop skills in medical documentation
- viii. Be aware of the principles of environmental, occupational and preventive aspects of general Toxicology

### 3. Course content and its term-wise distribution

Sl. No.	List of Topics	Term
	<b>Forensic Medicine</b>	
1.	Introduction to Forensic Medicine	I
2.	Medical ethics	I
3.	Legal procedures	I
4.	Personal Identification	I
5.	Death and its medico-legal importance	I
	<b>Toxicology</b>	
1.	General Toxicology	I
2.	Clinical toxicology	I
3.	Injury and its medico-legal importance	II
4.	Forensic psychiatry	II
5.	Post-mortem examination (ML autopsy)	II
6.	Impotence and sterility	II
7.	Virginity, defloration; pregnancy and delivery.(Integration with OBG)	II
8.	Abortion and infanticide (Integration with OBG)	II
9.	Sexual Offences	II
10.	Clinical Toxicology	II
	<b>Legislation relating to medical profession (relevant areas)</b>	
1.	Legislation relating to medical profession	II

#### 4. Teaching hours

##### 4.1 Gross division of teaching hours

<b>Forensic Medicine and Toxicology</b>		
<b>Year</b>	<b>Teaching hours- Lectures</b>	<b>Teaching hours- Non-lectures</b>
II BHMS	120	50

##### 4.2 Teaching hours theory

<b>S. no.</b>	<b>List of Topics</b>	<b>Hours</b>
1	Introduction to Forensic Medicine	02
2	Medical Ethics	03
3	Legal Procedures	04
4	Personal Identification	07
5	Death and its medicolegal importance	13
6	General Toxicology	07
7	Clinical Toxicology: Part-I	20
8	Injury and its medicolegal importance	10
9	Forensic Psychiatry	04
10	Postmortem Examination (ML Autopsy)	04
11	Impotence and Sterility	03

12	Virginity, Defloration, Pregnancy and Delivery (Integration with OBG)	03
13	Abortion and Infanticide (Integration with OBG)	04
14	Sexual Offences	06
15	Clinical Toxicology: Part-II	25
16	Legislation relating to Homoeopathic Medical Profession	05
	<b>Total</b>	<b>120</b>

#### 4.3 Teaching hours: Non-lecture

Sr. No	Non-Lecture Activity	Term	Time Allotted per Activity (Hours)
1	<b>Practical</b>	I & II	<b>35</b>
1(a)	<b>Demonstration</b> a) Weapons b) Toxicology - corrosives, irritants, systemic and miscellaneous poisons, gastric lavage c) Charts, diagrams, photographs, models, bones, x-ray films of medico-legal importance		10
1(b)	<b>Certificate Writing</b> a) Various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate.		3

	b) Knowledge of injury certificate, examination of rape victim and assailant, drunkenness, post-mortem examination report, age certification		
1(c)	<b>Consent-</b> Medical consent, implied consent, patient confidentiality, autonomy, role of care giver, audio-video recording of cases, safety and custody of medical records		2
1(d)	Demonstration of at least ten medico-legal autopsies.		20
2	<b>Demonstrative</b>	I & II	<b>15</b>
2(a)	Court Procedures (Moot Court)		05
2(b)	Field Visits		10
	<b>Total</b>		<b>50</b>

## 5 Content mapping (competencies tables)

### 5.1. Topic: Introduction to Forensic Medicine-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-1.1	KS CS PBL PRF	K	Definition of forensic medicine, medical	1. Define forensic medicine	C-I	MK	Interactive lecture	MCQ, Viva Voce	Viva voce	None
Hom UG-FMT-1.2		K	jurisprudence, History of Forensic medicine in India.	2. Define Medical Jurisprudence.	C-I	MK	Interactive lecture	MCQ, Viva Voce	Viva voce	
Hom UG-FMT-1.3		K		2. Describe the history of Forensic medicine in India.	C-I	DK	Interactive lecture	SAQ, Assignment	Theory - SAQ, Viva voce	

**5.2. Topic: Medical ethics-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-2.1	KS PC HO CS PBL PRF	K	Medical Ethics and etiquette – Code of ethics, Infamous conduct, medical negligence, professional secrecy, privileged communication, Rights and duties of doctors and patients etc	Define medical ethics	C-I	MK	Interactive lecture, Small Group Discussions , Written Case Scenario, Moot court.	MCQ, Assignment	Viva voce	None
Hom UG-FMT-2.2			National Commission for Homoeopathy and	Discuss professional misconduct with 2 examples.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	



Hom UG- FMT- 2.3			State Homoeopat hic Medical Councils Structure, functions and legislation Homoeopat hic Practitioner s (Profession al Conduct, Etiquette and Code of Ethics) Regulations ,1982 with amendment s (up to 2014) Duties of Registered Homoeopat hic Medical practitioner	Discuss medical negligence with 2 examples.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 2.4				Discuss privileged communica tion in relation to rights and duties of doctors and patients.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 2.5			in medico- legal cases. Consent, types of consent and its importanc e in practice Bioethics -	Explain the duties of registered Homoeopat hic medical practitioner in medicolega l cases.	C-II	MK	Interactive Lectures,	LAQ	Theory - LAQ , Viva voce Examination	
Hom UG- FMT- 2.6			Introducti on and principles	Discuss the principles of bioethics.	C-II	DK	Interactive lectures, Problem Based Learning.	Assignme nt	Viva voce Examination	

Hom UG- FMT- 2.7				Explain about the types of consent and its importance in practice	C-II	MK	Interactive lectures	SAQ, LAQ	Theory - SAQ and LAQ Viva voce examination	
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### 5.3. Topic: Legal procedures-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG- FMT- 3.1	KS CS PBL PRF	K	Understandin g legal terms – CrPC, IPC, IEA, offence, civil and criminal cases  Inquest, types of inquest  Courts of law in India, jurisdiction, hierarchy and	Define CrPC, IPC	C-I	MK	Interactive lecture	MCQ	Theory - Viva voce	None
Hom UG- FMT- 3.2				Differentiate between civil and criminal cases	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 3.3				Define Inquest	C-I	MK	Interactive lecture	MCQ	Theory - Viva voce	

Hom UG- FMT 3.4			power of different courts of law the sentences passed by them (India)	Explain the different types of Inquest.	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 3.5			legal procedure Medical evidences in courts, dying declaration, dying deposition, including medical certificates and medico- legal reports.	Classify the different courts of Law in India	C-II	MK	Lecture , Field visits.	MCQ, SAQ LAQ	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 3.6			Recording of evidence Witnesses and types Conduct and duties of doctors in witness box	Explain the power of different courts of law in India.	C-II	MK	Lecture , Field visits.	SAQ LAQ	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 3.7				Differentiate between dying declaration and dying disposition	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 3.8				Explain the types of witnesses	C-II	MK	Interactive lecture	MCQ, SAQ	Theory - MCQ, SAQ, Viva voce	
Hom UG- FMT- 3.6				Explain the duties of doctors in witness box	C-II	MK	Interactive lecture, Moot court, Field visit	SAQ LAQ	Theory - SAQ and LAQ , Viva voce	

**5.4. Topic: Personal identification-**

Sl. No.	Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-4.1	KS CS PBL PRF.	K	Determination of age, gender, race, religion in the living and the dead, Dactylography, foot prints.	Explain the procedure for Identification of age, sex, race and religion in living and dead.	C-II	MK	Interactive lecture, , written case scenario.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	None
Hom UG-FMT-4.2			Bones, scars and teeth, tattoo marks, handwriting , anthropome	Define Dactylography	C-I	MK	Interactive lecture,	Tutorial Assignment	Viva voce	

Hom UG- FMT- 4.3			try and other identificatio n data Examinatio n of biological stains and hair. DNA finger printing Medicolega l importance	Explain the medicolegal importance of dactylography.	C-II	MK	Interactive lecture, written case scenario. Demonstrati on	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 4.4				Discuss the methods of identification of data, with specific reference to anthropometry.	C-II	MK	Interactive lecture, written case scenario. Problem Based Learning, Demonstrati on	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 4.5				Explain the medicolegal importance of DNA fingerprinting	C-II	MK	Interactive lecture, Demonstrati on	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	

**5.5. Topic: death and its medicolegal importance-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-5.1	KS PRF CS	K	Thanatology, Death and its types, their medico-legal importance somatic death, molecular death, asphyxia, coma, syncope,	Define Thanatology	C-I	MK	Interactive lecture, lecture	MCQ, Tutorial Assignment	Viva voce	None
Hom UG-FMT-5.2				Differentiate between various types of death.	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	



Hom UG- FMT- 5.3			suspended animation Differentiat e cause, manner and mode of death Pathology of asphyxial death, negative autopsy,	Explain the mechanism of drowning with its signs and symptoms and medicolegal importance.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 5.4			sudden death and causes Organ transplantat ion and the laws governing organ transplantat ion Signs of death (1)	Explain the mechanism of hanging with its signs and symptoms and medicolegal importance.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 5.5			immediate, (2) early, (3) late and their medico- legal importance, estimation of post- mortem interval Asphyxial deaths	Explain the mechanism of coma.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 5.6			(mechanica l asphyxia and drowning). Death from starvation, cold and heat etc.	Explain suspended animation	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 5.7				Discuss medicolegal aspects of Organ Transplantation and laws governing it	C-II	DK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignme nt	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 5.8				Explain the immediate, early and late signs of death and their medicolegal importance	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
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**5.6. Topic: Injury and its medicolegal importance-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG- FMT- 6.1	KS CS PBL PRF	K	Mechanical, thermal, firearm, regional, transportation and traffic injuries;	Differentiate between various types of injuries.	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	None

Hom UG- FMT- 6.2			injuries from radiation, blast, electrocution and lightning and their medicolegal importance	Explain the types of mechanical injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 6.3				Explain the types of thermal injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 6.4				Explain the types of firearm injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 6.5				Explain the types of regional injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 6.6				Explain injuries from radiation, blast, electrocution and lightning with medico-legal importance	C-II	DK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ, LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 6.7				Define Ballistics	C-I	MK	Interactive lecture	MCQ, SAQ	Theory - MCQ, Viva voce	

**5.7. Topic: Forensic psychiatry-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-7.1	KS CS PBL PRF	K	Definitions, delusion, delirium, illusion, hallucination, impulse, obsession, mania, ICD-11 classification of	Explain delusion.	C-II	MK	Interactive lecture, lecture demonstration. Field visits.	SAQ	Theory – SAQ, Viva-voce	None
Hom UG-FMT-7.2			n of Insanity, mental subnormality. Definition and brief overview of common	Explain delirium.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	

Hom UG- FMT- 7.3			mental illnesses. True and feigned mental illness. Civil and criminal responsibilities of a person with mental illness/disability.	Explain Illusion.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce
Hom UG- FMT- 7.4			Development of insanity, diagnosis, admission to mental asylum, care of mentally ill person and discharge.	Explain hallucination.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce
Hom UG- FMT- 7.5				Explain Impulsive obsession disorder.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce
Hom UG- FMT- 7.6				Explain mania.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce
Hom UG- FMT- 7.7				Explain about the ICD-11 classification of Insanity, mental subnormality	C-II	MK	Interactive lecture	MCQ, SAQ LAQ, Assignment	Theory And Practical Examination

Hom UG- FMT- 7.8				Discuss civil and criminal responsibilities of person with mental illness.	C-II	MK		MCQ, SAQ LAQ, Assignme nt	Theory And Practical Examination	
Hom UG- FMT- 7.9				Explain Mental Health Act.	C-II	MK		MCQ, SAQ LAQ, Assignme nt	Theory And Practical Examination	
Hom UG- FMT- 7.10				Discuss about the admission of an insane person to mental asylum, care of mentally ill person and discharge.	C-II	MK		MCQ, SAQ LAQ, Assignmen t	Theory And Practical Examination	



**5.8. Topic: Postmortem examination (ML autopsy)-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-8.1	KS CS PBL PRF.	K	Purpose, procedure, legal bindings; difference between pathological and medico-legal autopsies. External examination, internal examination of adult, foetus and skeletal remains. Artefacts	Define autopsy	C-I	MK	Interactive lecture	MCQ,	Viva voce examination	None
Hom UG-FMT-8.2				Enlist the objectives of conducting a Medico legal Autopsy	C-II	MK	Interactive lecture, lecture demonstration,Field visits.	SAQ LAQ, Assignme nt	Theory – SAQ, LAQ And Viva voce Examination	

Hom UG- FMT- 8.3			Forensic science Laboratory	Define Artefacts	C-I	MK	Interactive lecture	MCQ, SAQ	Theory And Practical Examination	
Hom UG- FMT- 8.4				Discuss in detail about the Forensic science Laboratory	C-II	DK	Interactive lecture, lecture demonstrati on,Field visits.	Assignme nt	Theory-SAQ And Viva voce Examination	

**5.9. Topic: Impotency and sterility-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG- FMT- 9.1	KS CS PBL PRF.	K	Impotence, sterility, sterilization , Artificial Inseminatio n, surrogacy, in-vitro fertilization	Define Impotence and Sterility	C-I	MK	Interactive lecture,	MCQ, Assignme nt	Theory , Viva voce	Integration with OBG
Hom UG- FMT- 9.2				Explain the factors leading to impotency and sterility	C-II	MK	Integrated learning	SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 9.3			Legal issues related to impotence, sterility and artificial insemination, surrogacy, in-vitro fertilization legitimacy, sperm donation, sperm banks, ova banks, freezing of gametes, frozen embryos, medicolegal importance	Explain Artificial Insemination	C-II	MK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 9.4				Explain surrogacy with its medico-legal importance	C-II	MK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 9.5				Explain in- vitro fertilization with its medico-legal importance	C-II	DK	Interactive lecture	SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 9.6				Explain the functions of sperm and ova banks with its medicolegal importance	C-II	NK	Interactive lecture	SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	

**5.10. Topic: Sexual abuse, exploitation in all genders, defloration; pregnancy and delivery-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration					
								F	S						
Hom UG-FMT-10.1	KS CS PBL PRF.	K	The presumptive, probable and positive signs of pregnancy, sexual exploitation, sexual abuse, pregnancy, delivery, posthumous child, pseudocyesis, superfoetation, superfecundation, legitimacy and	Discuss about the presumptive, probable and positive signs of pregnancy	C-II	MK	Interactive lecture, lecture demonstration	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ, Viva voce	Integration with OBG					
Hom UG-FMT-10.2				Explain the medico Legal aspects of legitimacy							C-II	MK	Interactive lecture, lecture demonstration	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ, Viva voce
Hom UG-FMT-10.3				Explain superfoetation with its medicolegal importance.											

			paternity - legal aspects						
Hom UG-FMT-10.4				Explain superfecundation with its medicolegal importance.	C-II	MK		MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ, Viva voce

**5.11. Topic: Abortion and infanticide-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-11.1	KS CS PBL PRF.	K	Abortion: different methods, complications,	Define abortion.	C-I	MK	Interactive lecture	MCQ, SAQ	Theory - SAQ, Viva voce	Integration with OBG
Hom UG-FMT-11.2			accidents following criminal abortion, MTP, medicolegal importance	Explain different methods of abortion with its signs and symptoms and medicolegal importance						

Hom UG- FMT- 11.3			Abortifacient drugs and methods Infant death, signs of live birth, legal definitions,	Explain various signs of live birth	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 11.4			battered baby syndrome, cot death, Munchausen's syndrome	Discuss the regulations of MTP Act 1971	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 11.5				Explain battered baby syndrome	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ Assignment	Theory - SAQ, Viva voce	
Hom UG- FMT- 11.6				Explain cot death.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ Assignment	Theory - SAQ Viva voce	

Hom UG- FMT- 11.7				Explain Munchausen's syndrome	C-II	MK	Interactive lecture, , group discussion s, Integrated learning	MCQ, SAQ	Theory - SAQ Viva voce	
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**5.12. Topic: Sexual offences-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG- FMT- 12.1	KS CS PBL PRF.	K	Natural sexual offenses, Unnatural sexual offenses, Sexual	Enlist the various sexual offences	C-I	MK	Interactive lecture, small group discussions Integrated learning	Assignme nt	Theory- SAQ Viva voce	Integration w ith OBG
Hom UG- FMT- 12.2			perversions The clinical examinatio n and findings of victim and assailant	Classify the various sexual offences.	C-II	MK	Interactive lecture, small group discussion s, Integrated learning	MCQ, SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	



Hom UG- FMT- 12.3			The medicolegal aspects of sexual offenses and perversions . IPC, CrPC	Explain the natural sexual offences.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 12.4			{ Bhartiya Nyay Sanhita Bill 2023 & Bharatiya Sakshya (Second) Bill 2023 }	Explain the unnatural sexual offences.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 12.5		Explain the different sexual perversions.		C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ , Viva voce		
Hom UG- FMT- 12.6		Discuss the clinical examination and findings of victim and		C-II	MK	Interactive lecture, small group	SAQ, LAQ, Assignment	Theory - SAQ and LAQ , Viva voce		

				assailant of a sexual offence			discussion s, Integrated learning			
Hom UG-FMT-12.7				Explain the medicolegal aspects of sexual offenses and perversions.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-12.8				Explain the provisions in the Bhartiya Nyay Sanhita Bill 2023 & Bharatiya Sakshya (Second) Bill 2023 }	C-II	MK	Interactive lecture, small group discussions, Integrated learning	LAQ, Assignment	Theory - LAQ , Viva voce	

**5.13. Topic: General toxicology-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-13.1	KS PC HO CS PBL PRF.	K	Forensic Toxicology and Poisons, Classification of poisons Medico – legal	Classify various types of poisons	C-II	MK	Interactive lecture, lecture demonstration, group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	None
Hom UG-FMT-13.2			aspects of poisons, Antidotes and types, Diagnosis of poisoning in living and dead, General principles of management of poisoning,	Explain the general principles of management of poisoning	C-II	MK		SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-13.3				Explain the types of antidotes And its uses	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-13.4				Explain the diagnosis of poisoning in living and dead subjects,	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

			Duties of Homoeopathic Practitioner							
Hom UG-FMT-13.5		K	s in cases of poisoning	Describe the duties of a medical practitioner in the suspected case of poisoning	C-II	DK		MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ, Viva voce	

**5.14. Topic: General toxicology-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-14.1	KS PC HO CS PBL PRF.	K	i) Corrosives , ii) Irritants iii) Asphyxiants iv) Neurotics v) cardiac	Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of corrosive poisoning	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ, LAQ, Assignment	Theory - SAQ and LAQ, Viva voce	Integration with Materia medica

Hom UG- FMT- T14.2			vi) Miscellaneous vii) food Poisoning viii) Drug dependence & drug use.	Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of asphyxiant poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 14.3				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of neurotic poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 14.4				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of irritant poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 14.5				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of cardiac poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 14.6				Explain Medicolegal aspects in different poisoning	C-II	DK	Interactive lecture, , group discussions, Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 14.7				Differentiate between the various presentations of Arsenic and Lead poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG- FMT- 14.8				Explain differential diagnosis of Organophosphorus poisoning	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG- FMT- 14.9				Explain bioterrorism with the bacterial borne / microbial infections./ biologic positing	C-II	NK	Interactive lecture, , group discussions ,Integrated learning	SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	
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**5.15. Topic: Legislation relating to medical profession – including latest amendments and superceding acts as and when applicable-**

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG- FMT- 15	KS PC HO CS PBL PRF.	K	Various acts as described in term wise contents	Explain the medicolegal aspects of various acts under Forensic Medicine and Toxicology	C-II	MK	Interactive lecture, lecture demonstra tion, Integrated learning	MCQ, SAQ LAQ, Assignme nt	Theory - SAQ and LAQ , Viva voce	None.

**5.16. Topic: Demonstration of weapons, poisons (Practical)-**

Sl. No.	Content	Competency / Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
Hom UG-FMT-16.1	a) Weapons b) Toxicology - corrosives, irritants, systemic and miscellaneous poisons, gastric lavage c) Charts, diagrams, photographs, models, bones, x-ray films of medico-legal importance	KS CS PBL PRF	Enumerate different types of weapons. Enumerate different types of injuries caused by weapons	Identify various types of weapons	Demonstration, group discussions, Spotting, PBL	Practical Examination
Hom UG-FMT-16.2				Classify injury produced by them		
				Explain medicolegal importance of injuries produced by the weapons.		
			Identify various types of specimens of poisons			
Hom UG-FMT-16.3			Classify the poison as per their action			
			Explain medicolegal importance of poisons			
			Explain gastric lavage procedures ,			
			Enumerate different emergency conditions related to GIT where gastric lavage is indicated	Explain the merits of Gastric Lavage and its indications and contraindications.		



**5.17. Topic: Certificate Writing (Practical)-**

<b>Sl. No.</b>	<b>Content</b>	<b>Competency / Outcome</b>	<b>Entry behaviour</b>	<b>Specific Learning Objectives</b>	<b>Learner activity</b>	<b>Assessment</b>
Hom UG- FMT- 17.1	Various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate.	KS CS PBL PRF	Enlist the names of different medical certificates	Write various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate.	Certificate writing. Written case scenario.	Practical Examination
Hom UG- FMT- 17.2	Knowledge of injury certificate, examination of rape victim and assailant, drunkenness, post-mortem examination report, age certification			Write a report of examination of rape victim, Injury Certificate, Post Mortem Examination report, Age Certification. Drunkenness Certificate.		

### 5.18. Topic: Consent (Practical)-

Sl. No.	Content	Competency / Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
Hom UG- FMT- 18	Medical consent, implied consent, patient confidentiality, autonomy, role of care giver, audio-video recording of cases, safety and custody of medical records	KS CS PBL PRF	Explain the meaning of consent.	Write consent in given format.	Written case scenario, Group discussion.	Practical Examination

### 6. Teaching learning methods

Lectures (Theory)	Non-lectures (Practical/Demonstrative)
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
Structured interactive sessions	Tutorials
	Seminars
	Video clips
	Assignments
	Field visits (Court visit and Isolation hospitals).
	Self-learning

## 7. Details of assessment

### 7.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II(7-12 Months)		
1	Second Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		10 Marks Viva	50 Marks Practical/ Viva 1. Viva voce -25 marks 2. Practical– 25 marks (Identification of weapons, poisons, X-Rays- 10 Marks, Certificate writing- 10 Marks Case Scenario of consent taking- 5 marks)	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

**PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment**

### 7.2 Number of papers and Marks Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment*	Grand Total
1	HomUG-FMT	01	100 marks	50 marks**	40 marks	10 marks  (Marks of PA I + TT I + PA II)	200marks

**\*Method of Calculation of Internal Assessment Marks for Final University Examination:**

**Marks of IA-**     (Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

**\*\*Details of practical assessment at FUE**

Sr No	Headings	Marks
1	6 spotters – Bones, weapons, Toxicology specimens, Photographs, models – with their medicolegal aspects - 5 marks Each	30
2	Certificate Writing	10
3	Journal	10
	<b>Total</b>	<b>50</b>

### 7.3 Paper Layout

Summative assessment(FUE):

Theory- 100 marks

MCQ	10 marks
SAQ	40 marks
LAQ	50 marks

### 7.4 Distribution of questions for theory exam

Sr.No	Paper	B	C	D		
				MCQ	SAQ(5 Marks)	LAQ
	A	Term	Marks	(1 Mark)	(10 Marks)	(10 Marks)
	<b>List of Topics</b>					
				<b>Type of Questions“Yes”can be asked. “No”should not be asked.</b>		
1	Introduction to Forensic Medicine& Medical Ethics Legal procedure	I	Refer Next Table 7.5	No	Yes	No
2	Personal Identification	I		Yes	Yes	No
3	Death and Its Medicolegal importance	I		Yes	No	Yes
4	Injury and Its medicolegal importance	II		Yes	No	Yes
5	Impotence and sterility	II		Yes	Yes	Yes

	Virginity , defloration pregnancy and Delivery	II				
	Abortion and infanticide	II				
	Sexual offences	II				
6	General Toxicology	I		Yes	Yes	No
7	Clinical Toxicology- Corrosive Poisons	I		Yes	Yes	No
8	Clinical Toxicology- Irritant Poisons	I		Yes	No	Yes
9	Clinical Toxicology- Asphyxiant poisons	I		No	Yes	No
10	Clinical Toxicology- Neurotics Poisons	II		No	Yes	No
11	Clinical Toxicology- Cardiac Poisons	II		No	Yes	No
12	Clinical Toxicology- Miscellaneous Poisons	II		Yes	No	No
13	Clinical Toxicology- Food Poisoning, Drug Dependence and drug abuse	II		Yes	No	No
14	Legislation relating to medical profession	II		No	No	Yes

### 7.5 Theme-wise distribution of questions:

Theme	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Introduction to Forensic Medicine Medical ethics Legal procedure	I	5	0	5	0
B	Personal Identification	I	6	1	5	0
C	Death and Its Medicolegal importance	I	11	1	0	10
D	Injury and Its medicolegal importance	II	11	1	0	10
E	Impotence and sterility Virginity , defloration pregnancy and Delivery, Abortion, Infanticide Sexual offences	II	16	1	5	10
F	General Toxicology	I	6	1	5	0
G	Clinical Toxicology- Corrosive Poisons	I	6	1	5	0
H	Clinical Toxicology- Irritant Poisons	I	11	1	0	10
I	Clinical Toxicology- Asphyxiant poisons	I	5	0	5	0
J	Clinical Toxicology- Neurotics Poisons	II	5	0	5	0
K	Clinical Toxicology- Cardiac Poisons	II	5	0	5	0
L	Clinical Toxicology- Miscellaneous Poisons	II	2	2	0	0
M	Clinical Toxicology- Food Poisoning, Drug Dependence and drug abuse	II	1	1	0	0
N	Legislation relating to medical profession	II	10	0	0	10

## 7.6 Question paper blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 7.5 for themes)
Q1	<p>Multiple choice Questions (MCQ) 10 Questions</p> <p>1 mark each</p> <p>All compulsory</p> <p>Must know part: 6 MCQ Desirable to know: 2 MCQ. Nice to know: 2MCQ</p>	<ol style="list-style-type: none"> <li>1. Theme B</li> <li>2. Theme C</li> <li>3. Theme D</li> <li>4. Theme E</li> <li>5. Theme F</li> <li>6. Theme G</li> <li>7. Theme H</li> <li>8. Theme L</li> <li>9. Theme L</li> <li>10. Theme M</li> </ol>



Q2	<p>Short answer Questions(SAQ) 8Questions</p> <p>5 Marks Each , All compulsory Must know part:7 SAQ</p> <p>Desirable to know: 1 SAQ Nice to know: Nil</p>	<ol style="list-style-type: none"> <li>1. Theme A</li> <li>2. Theme B</li> <li>3. Theme E</li> <li>4. Theme F</li> <li>5. Theme G</li> <li>6. Theme I</li> <li>7. Theme J</li> <li>8. Theme K</li> </ol>
Q3	<p>Long answer Questions (LAQ) 5 Questions</p> <p>10 Marks each All compulsory</p>	<ol style="list-style-type: none"> <li>1. Theme C</li> <li>2. Theme D</li> <li>3. Theme E</li> <li>4. Theme H</li> <li>5. Theme N</li> </ol>

## 8. List of recommended Books

- C. K. Parikh, 2019, *Text Book of Medical Jurisprudence Forensic Medicine & Toxicology* (edition 21<sup>st</sup>) , CBS Publishers
- K.S. Narayan Murty, 2022, *The Essentials of Forensic Medicine & Toxicology*, Jaypee Publication ,
- Modi, N.J , *A Text Book of Medical Jurisprudence and Toxicology*
- Biswas Gautam, 2015, *Review of Forensic Medicine and Toxicology (Including Clinical & Pathological Aspects)*, Jaypee Brothers Medical Publisher (P) Ltd;.
- Nandy Apurba, *Principles of Forensic Medicine Including Toxicology*,
- Sharma D B, 2022, *Essential of Forensic Medicine and Toxicology*, (First edition) , B. Jain Publishers

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