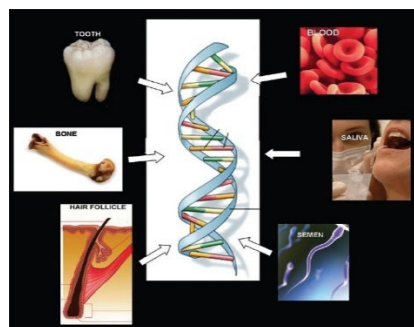
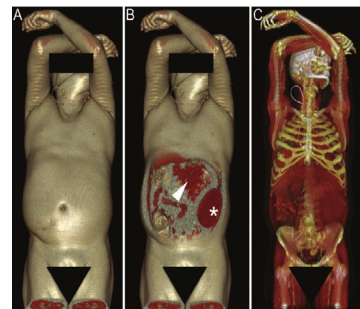




STUDY GUIDE 2022

3rd Year MBBS

FORENSIC MEDICINE



CMH LAHORE MEDICAL COLLEGE

& INSTITUTE OF DENTISTRY

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INTRODUCTION OF THE SUBJECT:

FORENSIC MEDICINE and TOXICOLOGY implicitly is a conglomerate of two subjects, FORENSIC MEDICINE AND TOXICOLOGY, which are not alike. Both are well-recognized specialties of medical science in their own right on the global scenario.

Forensic Medicine can be defined as the medical specialty, which applies the principles and practice of medicine to the elucidation of question in judicial proceedings. The word medicine encompassing all the fields of medical sciences, whereas Toxicology involves all aspects of adverse effects of chemicals on Biological systems which includes their mechanism, identification of Toxic agents, legal ramification being a part of it. So Toxicology, broadly speaking includes occupational, Environmental, Clinical, Analytical and Forensic Toxicology.

Forensic Medicine has not only responded for the contemporary needs of law enforcement, on many instances, it has even stimulated and initiated improvements. Any change or technical advancement in other fields affects the working and expertise of a Medico-legal examiner, as he has to interpret his observation and findings in accordance to the existing laws of the land, The Medico-legal examiner is under constant pressure for keeping himself abreast with the ever-changing fields of law and medicine. The curricula should change accordingly.

The existing medico-legal system of Pakistan requires from a medical officer (Possessing M.B.B.S degree and a medico-legal training of few hours in 3rd year M.B.B.S course) to conduct medico-legal clinical examination of a living person, victim of physical, mental or sexual assault, to perform autopsy on a dead, died of any cause natural or un-natural and to verify, certify and testify his observations to the satisfaction of law enforcers and the courts for the justifiable execution and administration of justice. If the job requirement of graduates requires them to perform postmortems examinations, they should receive appropriate further training after graduation.

INTRODUCTION OF THE DEPARTMENT:

Forensic Medicine is the branch of science which helps the law in searching for the truth to maintain justice in the society. The increasing interest in Forensic Medicine throughout the world is no doubt a result of the global rise in both crime and litigation.

The Department of Forensic Medicine and Toxicology is working with the aim of equipping the medical students with the essential knowledge of crime scene investigation. To meet the upcoming challenges, advance technology and new techniques are also introduced to the students.

The museum of the department is the most modern one having Fiberglass models, wet specimens, instruments and other exhibits like Dura pictures, X-Rays of medico-legal nature and specimen of poisons, weapons etc. Thus, imparting knowledge and contributing to other teaching and training facilities directed to the undergraduate students.

The department has well-furnished and well-equipped Analytical Laboratory dealing with teaching and training in areas of Forensic Toxicology, Forensic Serology, Forensic Anatomy, and Forensic Radiology.

The department has got a seminar room where a “general club” is held every fortnight. This is under process of completion and shall be equipped with a slide projector and multimedia through which teaching material (slides / transparencies) can be displayed and discussed. A departmental library shall also be set up in the seminar room.

For practical orientation, the students visit Forensic Medicine Department, KEMU/AIMC for Autopsy and Medico Legal training.

The students also visit Punjab Forensic Science Agency Lahore to see working of multiple analytical labs under one roof.

The department is placed on the first floor:

The **Museum** of the department has

1. Fiberglass models
2. Firearm Weapons (including rifles, pistols , bullets , grenades , missiles all original but diffused for security reasons)
3. Wet specimens
4. Human skeletons
5. Poison specimens
6. Radiographs
7. Durra prints
8. Instruments

Other exhibits, imparting knowledge and providing source of self-learning to the undergraduate and postgraduate students. The museum has a teaching area for practical demonstration classes.



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Curriculum applicable for MBBS Year-III students 2021-22



Curriculum applicable for MBBS Year-III students 2021-22



Lecture Hall *Curriculum applicable for MBBS Year-III students 2021-22* is Air-conditioned with the capacity of one hundred and fifty, furnished with modern audiovisual arrangements.



Curriculum applicable for MBBS Year-III students 2021-22



Curriculum applicable for MBBS Year-III students 2021-22



Curriculum applicable for MBBS Year-III students 2021-22

Laboratory (Air-conditioned), well-furnished and well-equipped dealing with teaching and training in areas of Forensic Toxicology, Forensic serology, forensic anatomy and forensic radiology, the lab has attached preparation room and equipped with instruments, equipment and chemicals, relevant to the nature of work.



Offices for Professor, Associate Professor, Assistant Professor, Lecturers and Administrative / Paramedical Staff.

Seminar room / Departmental Library under process of completion and shall be equipped with a slide projector and multimedia through which teaching material (slides / transparencies) can be displayed and discussed. A departmental library shall also be set up in the same room.



Computer room: The department has one computer system with laser printer, Broadband Internet facility is available to staff and students through Wi-Fi.

Washrooms: Separate for staff male and female students.

ADMINISTRATIVE SUET UP:

The department is staffed with One Professor, One Associate Professor, One Assistant Professor, Four Demonstrators, PA to HOD, One Head Lab Assistant, Two Lab Assistants, one Lab Attendant, one Store Keeper and one Naib Qasid.

Offices:

Sr. No.	No. of Offices Available
1	1 (HOD office)
2	1 (Associate Professor Office)
3	2 (Assistant Professor office)
4	1 (Conference /Tutorial Room)
5	1 Demo Room
6	1 (PA office)

TEACHING STAFF (FACULTY)

S. NO.	NAME	DESIGNATION	QUALIFICATION
1.	Prof. Javed Iqbal Khokhar	Professor & HOD	MBBS, DMJ
2.	Dr. Sadaf Nadir	Associate Professor	MBBS, DMJ, CHPE
3.	Dr. Salman Pervaiz Rana	Assistant Professor	MBBS, DMJ, CHPE
4.	Dr. Mohsana Urooj Rana	Demonstrator	MBBS, DMJ
5.	Dr. Bakhtawar H. Khan	Demonstrator	MBBS
6.	Dr. Amna Shahid	Demonstrator	MBBS
7.	Dr. Maria Safdar	Demonstrator	MBBS
8.	Dr. Tayyaba Tahir	Demonstrator	MBBS



**SITTING ROW: Left to Right- DR. SALMAN, DR. MOHSANA, PROF JAVAID IQBAL KHOKHAR, DR. SADAF, DR. SHAFAT
STANDING ROW: Left to Right - DR. MARIA SAFDAR, DR. BAKHTAWAR HUMA KHAN**



Left to Right -DR. SALMAN, DR. MOHSANA, DR. AMNA, DR. SADAF, DR. BAKHTAWAR, PROF. JAVAID IQBAL KHOKHAR

Curriculum applicable for MBBS Year-III students 2021-22



Left to Right - DR. SALMAN, DR. MOHSANA, DR. SADAF, PROF JAVAID KHOKHAR, DR. MARIA, DR. BAKHTAWAR, DR. SHAFAT



Left to Right - DR. SALMAN, DR. MOHSANA, DR. SADAF, DR. MARIA, PROF JAVAID KHOKHAR, DR. AMNA, DR. BAKHTAWAR

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S. NO.	NAME	DESIGNATION	QUALIFICATION
1.	Naveed Ahmed	PA to HOD/Computer Operator	MA
2.	Hafiz M. Akbar Islam	HLA	FA
3.	Khurram Inam	Lab. Assistant	Matric
4.	Shahid Hussain Mufti	Lab. Assistant	Matric
5.	M. Khalid-ur-Rehman	Storekeeper	FA
6.	Ahsan-ul-Haq	Lab. Attendant	Middle
7.	M. Ijaz	Naib Qasid	9 th

PARA-MEDICAL STAFF



General Information:

- 1.1 Mission and Goals
- 1.2 Professional Values
- 1.3 Quality policy and Quality objects
- 1.4 Administrative set up

MISSION & GOALS:

We are committed to the system of strengthening the scientific facts as medical evidence in the field of Forensic Medicine to drive a quality change in the procedural work of courts of law for furthering of justice and extending to the community, the broadest possible benefits. Our goals are maintaining and offering specialized educational and training programs and extending research opportunities not only to its own faculty but students.

OBJECTIVES:

To expedite the academic growth and development in undergraduate medical education. To improve health standards of the community in this underdeveloped region of the world, focus of Medical Education & Research will be on regional medical issues. Trained graduates will successfully execute and streamline the Medical profession and will fill the vacuum in the growing medical schools and industry. Development of human resource, research and technology in this institute will ultimately help in the development of national economy.

PROFESSIONAL VALUES:

The department is committed to maintain highest standard of ethical and professional values while interacting with the public, students and colleagues.

QUALITY POLICY AND OBJECTIVES:

The department ensures the delivery of quality medical education. The teaching curriculum is being revolutionized and brought in line with the international standards to provide community oriented medical education and to produce better health care professionals and system.

Overview:

All major topics will be covered in the form of lectures, CBL's and CPC's in three blocks. Total contact hours are 250 Hours

Learning Strategies.

- a. Interactive lectures
- b. Practical Demonstrations
- c. Case based learning
- d. Small group discussions
- e. Visits
- f. Tutorials

Assessment.

- g. There will be two end block exams taken at the end of block I& II. The syllabus for end block examination will be announced by the department at least 02 weeks prior to examination. End block exam will be conducted by the respective Department. Assessment tools to be decided by respective faculty. Schedule and date will be announced by the examination branch of respective institute.
- h. Pre annual exam will be taken for both theory and practical after completion of the curriculum at the end of block III. Pre-annual examination will be from whole syllabus. Table of specification for Pre annual exam is similar to annual exam. Schedule for Pre- annual exam (Theory and Practical) will be announced by the examination branch of respective institute
- i. Marks of End block and Pre annual exams will contribute to internal assessment
- j. Schedule for annual examination (Theory and Practical) will be announced by NUMS. Practical examination will be conducted by the department itself while theory part will be conducted by the Examination Department NUMS.

What is a Study Guide.

It is an aid to:

- Inform students how student learning program of the semester wise module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

The Study Guide.

- Communicates information on organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teaching, clinical skills, demonstration, tutorial and case based learning that will be implemented to achieve the module objectives
- Provides a list of learning resources such as books, computer assisted learning programs, web-links, journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and semester examinations on the student's overall performance.

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- Includes information in the assessment methods that will be held to determine every student's achievement of objectives.

- Focuses on information pertaining to examination policy, rules and regulations.

Curriculum framework:

Students will experience curriculum of 1st, 2nd & 3rd module.

Curriculum:

Comprises of system-based modules such as statistical application in health and disease, infections and Behavioral Modification and Environment and Health Planning. Which links basic science knowledge to clinical problems. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

Case based discussions, computer based assignments, early exposure to clinics, community based learning in community medicine department is the characteristic of Public Health Prevention and Control Measures learn in the modular system.

Learning Methodologies:

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Hospital / Clinic visits
- Small group discussion
- Problem based learning
- Role plays
- Presentations
- Quizzes
- Tutorials
- Field visits
- Self-directed study

Interactive lectures:

In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. students are actively involved in the learning process.

Hospital visits:

In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

Small Group Discussion (SGD):

This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured around major Public Health Issues and topics. Students exchange opinions and apply

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knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Case Based Learning:

A small group discussion format where learning is focused around a series of questions based on a community medicine/Public Health Preventive and Control measures. Students' discuss and answer the questions applying relevant knowledge gained in lectures, tutorials, field visits and basic health sciences during the module.

Team Based Learning:

Team-Based Learning is an evidence based collaborative learning teaching strategy designed around units of instruction, known as modules. In Community Medicine it includes community based learning and surveys.

Problem Based Learning:

Problem-based learning is a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material.

Tutorials:

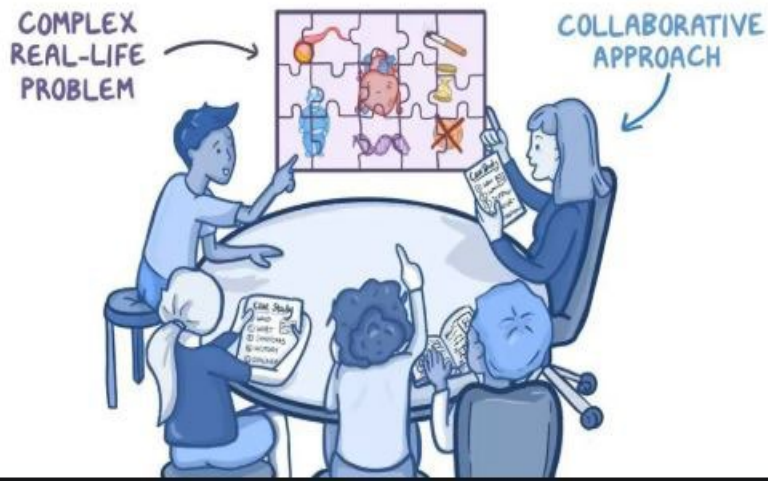
Groups around 25 to 30 students are given a topic for self-study and discussion with the supervisor.

TRADITIONAL TEACHING / LEARNING :



PROBLEM BASED LEARNING :

PROBLEM-BASED LEARNING (PBL)

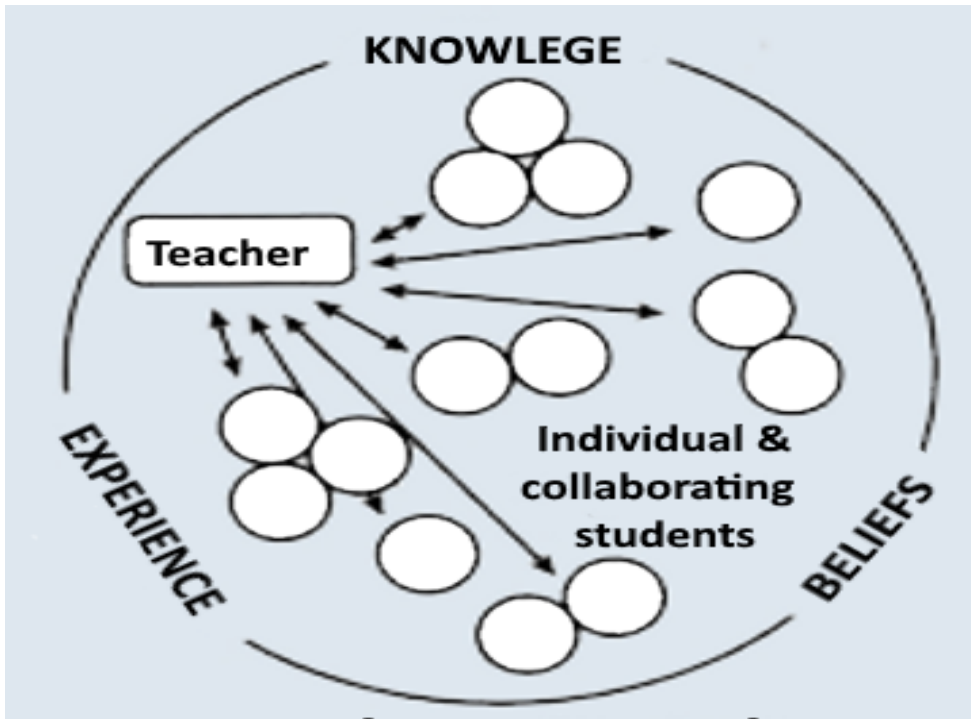


Teacher centered vs Student centered approach:

TEACHER CENTERED APPROACH:



STUDENT CENTERED APPROACH:



SECTION-III

FORENSIC MEDICINE

FORENSIC MEDICINE - BLOCK I

CODE: Y3B1

DURATION: 12 weeks

S No	Theme/Block	Learning Outcomes By the end of Block I, the students will be able to:	Course Content	% Weightage
1	Introduction to Forensic Medical Sciences	Describe the role of Forensic Medicine / Sciences in Crime detection, especially in crimes involving human life & body in national as well as international context.	Role of Forensic Medicine / Sciences in Crime detection, especially in crimes involving human life & body	03
2	Thanatology	<ul style="list-style-type: none">Identify the causes, manner, mode, mechanisms, medicolegal aspects and indicators of death.Correlate between the physicochemical changes occurring in various body tissues after death under different environmental conditions to the medico-legal aspects of sudden and unexpected deaths.	<ul style="list-style-type: none">Scientific concepts regarding death, medico-legal aspect of Brain death, Indicators of Death, medico-legal aspects of Sudden and unexpected deaths, causes, manner, mode and mechanisms of death. Physicochemical changes subsequent to death occurring in various body tissues and organs under various environmental conditions.To write a Certification of death according to WHO guidelinesAutopsy: Types, objectives, rules, and techniques and describe procedure for post-mortem; Methods for Assessment of Fatal period and post-mortem interval. Post-mortem artefacts. Risks and Hazards of autopsy, and Autopsy Protocol. Procedure for selection and reservation, labelling and dispatch of Biological and non-Biological materials for laboratory examination; and collect relevant samples.Exhumation procedures, and its value and limitations	27

3	Traumatology-I	<ul style="list-style-type: none"> • Correlate the mechanisms of wound production to their medico-legal aspects. • Identify different ammunitions • Appraise the nomenclature, wound Ballistics and medico-legal aspects of mechanical injuries • List and debate on the laws in relation to causing Bodily harm, Wounding and Homicide 	<ul style="list-style-type: none"> • Mechanical Injuries: <ul style="list-style-type: none"> ○ Mechanisms of wound production, classification of wounds, wounds produced by conventional weapons and their medico-legal aspects. ○ Firearms, Ammunition, Classification, Nomenclature, 	50
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		<ul style="list-style-type: none"> • Distinguish between ante-mortem and post-mortem wounds • Diagnose the manner of death (suicidal, homicidal and accidental) • Classify wounds • Relate the mechanisms of wound production to their medico-legal aspects. • Classify firearm injuries. • Identify different ammunitions • Appraise the nomenclature, wound Ballistics and medico-legal aspects of mechanical injuries • List and debate on the laws in relation to causing Bodily harm, Wounding and Homicide. • Distinguish between ante-mortem and post-mortem wounds. • Diagnose the manner of death (suicidal, homicidal and accidental) 	<p>wound Ballistics and medico-legal aspects.</p> <ul style="list-style-type: none"> ○ Medico-Legal Considerations: <ul style="list-style-type: none"> ▪ Suicide, homicide and accident. 	
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4	Personal Identity	<ul style="list-style-type: none"> • Distinguish between living and dead, decomposed and mutilated from burnt bodies, skeletal and fragmentary remains by using appropriate parameters of personal identity. • Use different techniques (Dentistry: Radiology, Neutron Activation Analysis etc.) and objective methods of (Osteometry, Dactyloscopy, DNATEchnique, Super imposition photography etc.). • Determine the age, sex and race of an individual by various methods with their medico-legal aspects. • Critique on methods to trace the evidence, Lockard's Principle of exchange and its medico-legal significance. 	<ul style="list-style-type: none"> • Parameters of personal identity, methods of identifying living, dead, decomposed, mutilated and burnt bodies, and skeletal and fragmentary remains, • Special techniques (Dentistry: Radiology, Neutron Activation Analysis etc.), and objective methods of identification (Osteometry, Dactyloscopy, DNATEchnique, Super imposition photography etc.). • Methods of determination of age, sex and race by various methods with their medico-legal aspects. • Methods to trace evidence, Locard's Principle of exchange and its medico-legal significance 	10
5	Biological Specimens	<ul style="list-style-type: none"> • Appraise the forensic importance of Biological specimens (Blood, 	<ul style="list-style-type: none"> • Forensic importance of Biological specimens (Blood, Semen, Salvia, 	10

		<p>Semen, Salvia, Vomitus, Breath, Urine, Hair).</p> <ul style="list-style-type: none"> • Collects, preserve, dispatch various human body specimens 	<p>Vomitus, Breath, Urine, Hair).</p> <ul style="list-style-type: none"> • Method of their collection, preservation, dispatch and the common laboratory tests 	
T o t a l				100
	End Block Assessment	End block assessment is to be taken by the concerned institute itself. Assessment tools: MCQs & SAQs/SEQs		

FORENSIC MEDICINE - BLOCK I

CODE:Y3B1

DURATION: 12 WEEKS

THEME/LEARNING OUTCOMES	%
At the end of this block, student shall be able to	
Perform Autopsy& Medicolegal Examinations	10
Examine different biological specimens in forensic context.	10
Perform the procedure of preservation, dispatch of Biological and other evidentiary material	10
Write Death Certificate according to WHO guidelines	10
Perform Exhumation procedure	10
Identify the importance of finger prints in personal identity	10
Distinguish various firearm injuries	10
Identification of Blood, Semen, Saliva etc.	10
Examine an injured person, certify nature, manner of cause, causative agent and dating of wounds. Link Sequelae of trauma to its original cause and search for the relationship of sequelae to pre-existing disease.	10
Perform common lab tests on different body specimens	10
Total	100%

FORENSIC MEDICINE - BLOCK II

Duration: 12 weeks

CODE: Y3B2

S No	Theme/Block	Learning Outcomes By the end of Block I, the students will be able to:	Course Content	% Weightage
1	Traumatology-II	<ul style="list-style-type: none"> • Differentiate among the various possible etiologies of Regional Injuries, of Head (Scalp, Skull, Brain) and Face, Vertebral column and its contents, Neck, Chest, Abdomen, Limbs, Bones and Joints and Special trauma (Transportation injuries, Police torture, and Deaths in Custody) • Compare and contrast Heat, Cold, Electrical injuries with emphasis on their medicolegal aspects. • Recognize signs of violent death, mechanical, chemical and environmental asphyxia death and their medico legal implications. • Interpret injuries caused by blast 	<ul style="list-style-type: none"> • Regional Injuries, of Head (Scalp, Skull, Brain) and Face, Vertebral column and its contents, Neck, Chest, Abdomen, Limbs, Bones and Joints and Special trauma such as: Transportation injuries, Police torture, and Deaths in Custody. And Should be able to determine the medicolegal aspects of Heat, Cold, Electrical injuries. • Blast injuries. Recognition and interpretation of injuries caused by blast 	10
2	Violent Deaths Due to Asphyxia	Define, Classify and detect the anatomical, physiological, biochemical and pathological signs of violent death, mechanical, chemical and environmental asphyxia death and their medicolegal implications.	Define, Classify, causes of; and detect the Anatomical, Physiological, Biochemical and Pathological signs of violent death; and of Mechanical, chemical and environmental asphyxia death and their medicolegal implications	10
3	Sexual Offences /Reproduction	<ul style="list-style-type: none"> • Assess the sexual offences and relate it to relevant Sections of Law (Zina and Hudood Ordinance) • Differentiate between natural and unnatural sexual offences • Address the causes of common sexual perversions • Distinguish between Impotence, Virginity, Pregnancy and criminal acts during delivery (their medico- 	<ul style="list-style-type: none"> • Sexual Offences and Relevant Sections of Law (Zina and Hudood Ordinance) <ul style="list-style-type: none"> ○ Natural and unnatural sexual offences ○ Medical examination of victim and assailant, collection of specific specimens. ○ Common sexual perversions and their cause. 	30

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		<p>legal aspects, examination procedure and reporting)</p> <ul style="list-style-type: none"> • Appraise the procedure of performing clinical I examination of victim and assailant in case of sexual offense, collect specific specimens and write a required certification. • Appraise the relevant sections of law, Medico-legal aspects applicable to miscarriage; and beable to. • Crime Against New-Born, Infants and Child. • identify infanticide and criminal and non-accidental violence or abuse to a newborn, infant or child. 	<ul style="list-style-type: none"> ○ approach to Impotence, determination of Virginitiy, Pregnancy and criminal processes during delivery, their medico-legal aspects, examination procedure and reporting. ○ Miscarriage: ○ Crime Against New-Born, Infants and Child. <ul style="list-style-type: none"> • Infanticide and criminal and non-accidental violence or abuse to a newborn, infant or child 	
4	General Toxicology	<ul style="list-style-type: none"> • Relate the cases of toxicology to its related laws • Manage toxicological cases in acute and chronic exposure • Interpret acute and chronic cases of poisoning in living and dead 	<ul style="list-style-type: none"> • Scope of forensic aspects of toxicology. • Common Toxicants in our environments and their abuse 	10
5	Poisons	<ul style="list-style-type: none"> • Differentiate between the different sources, mechanism of action, sign and symptoms and management of poisoning • Analyze the autopsy findings of a case with poisoning with emphasis on its medicolegal aspects 	<ul style="list-style-type: none"> • Sources of poisons • Mechanism of action of poisons • Sign and symptoms of poisoning • Management of poisoning • Autopsy findings of death due to poisoning Medicolegal aspects 	40
Total				100
	End Block Assessment	End block assessment is to be taken by the concerned institute itself. Assessment tools: MCQs & SAQs/SEQs		

FORENSIC MEDICINE - BLOCK II

CODE:Y3B2

At the end of this block, student shall be able to

THEME/LEARNING OUTCOMES	%
Perform Autopsy& Medicolegal Examinations	20
Perform medico-legal Examination of injured	30
Preserve and dispatch biological and other evidentiary material	10
Examine mother and aborted material; and send aborted material in proper preservative for examination	40
Total	100%

FORENSIC MEDICINE - BLOCK III

Duration: 12 weeks

CODE: Y3B3

S No	Theme/Block	Learning Outcomes By the end of Block I, the students will be able to:	Course Content	% Weightage
1	Specific Poisons	<p>Study of Poisons/drugs prevailing in our society along with medico-legal aspects is recommended. Emphasis must be given to the following poisons/drugs:</p> <ul style="list-style-type: none"> • Alcohol • Opiates, Opioids and other narcotics • Salicylates and paracetamol • Hypnotics and Sedatives • Stimulants (Cocaine), cannabis • Poisonous Plants (Aconite, Belladonna, Hyoscyamus, Stramonium, Digitalis, Ergot, Mushrooms, Nux Vomica, Oleander, Tobacco) • Venomous insects (Snakes) • Inorganic elements, Antimony, Arsenic, lead, Mercury, Phosphorus • Volatile Poisons and corrosives (Carbon monoxide, Hydrocarbons, Cyanides, Sulphuric Acid, Oxalic Acid, Carbolic Acid and Alkalis) • Pesticides, Herbicides and Insecticides and others 	<p>Study of following poisons/drugs:</p> <ul style="list-style-type: none"> • Alcohol • Opiates, Opioids and other narcotics • Salicylates and paracetamol • Hypnotics and Sedatives • Stimulants (Cocaine), cannabis • Poisonous Plants (Aconite, Belladonna, Hyoscyamus, Stramonium, Digitalis, Ergot, Mushrooms, Nux Vomica, Oleander, Tobacco) • Venomous insects (Snakes) • Inorganic elements, Antimony, Arsenic, lead, Mercury, Phosphorus • Volatile Poisons and corrosives (Carbon monoxide, Hydrocarbons, Cyanides, Sulphuric Acid, Oxalic Acid, Carbolic Acid and Alkalis) • Pesticides, Herbicides and Insecticides and others 	40
2	Forensic Psychiatry	<ul style="list-style-type: none"> • Distinguish between true and feigned insanity. • Advise on procedure of restraint of the mentally ill. • List limitations to civil and criminal responsibilities of mentally ill. 	<ul style="list-style-type: none"> • True and feigned insanity • Procedure of restraint of the mentally ill • Limitations to civil and criminal responsibilities of mentally ill 	25

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3	Medical Ethics, consent & negligence	Apply ethical principles of medicine as physicians/ in their clinical clerkships according to national as well as international code of ethics	<ul style="list-style-type: none"> • Powers and jurisdiction of courts • procedures for inquest, and legal Procedures. • Important Legal terms • Application of relevant legal sections of the penal code • Role of a medical doctor in the medico-legal system • Medical evidence in courts. • Document information to be prepared by a medical doctor for legal procedures. <ul style="list-style-type: none"> ○ Procedure of Court attendance and recording of evidence 	10
4	Law in relation to medical man	<ul style="list-style-type: none"> • Identify the principles of interprofessional and patient interaction in clinical practice • Correlate the medical ethics while examining patient to medical negligence and professional misconduct • Justify the guarding of professional secrets and privileged communication. • Debate on legal and ethical aspect of organ transplantation • Employ the moral and ethical implications of medical procedures (Artificial insemination, Therapeutic abortions, Euthanasia, Biomedical research) in clinical practice 	Law in relation to medical man	25
Total				100
	End Block Assessment	End block assessment is to be taken by the concerned institute itself. Proposed Assessment tools: MCQs & SAQs/SEQs		

FORENSIC MEDICINE - BLOCK III

CODE:Y3M3	
Duration: 10 weeks	
THEME	%
Autopsies	20
Medico-legal Examination of injured	40
Visits to Court, Forensic Science Laboratory, Psychiatric unit or Jail, Site during conduction of exhumation	20
Visual, olfactory and tactile identification of common poisons found in communities and country	20
Total	100%

FORENSIC MEDICINE

PRE-ANNUAL/ANNUAL 3RD PROFESSIONAL EXAMINATION: THEORY

Time Allowed	= 03 hrs(Including MCQs)	
Marks of theory paper	= 80	
Internal assessment	= 20	
Total marks	= 100	
Pass Marks	= 50	
40 x MCQs	= (40 Marks)	Time = 50
MintsQ. No. 1,2,3,4,5,6,7,8,9		
5 x SAQs/SEQs (Recall)	= 04 marks	
each 4 x SAQs/SEQs (Application)	= 05	
marks each		
Total Marks:	= (40 Marks)	Time = 2 hours & 10 min

TOPIC	NUMBER OF MCQs (40) Recall (13) Application (27) (1 mark each)	NUMBER OF SAQs/SEQs (09) (5 x SAQs/SEQs (Recall) = 04 marks each 4 x SAQs/SEQs (Application) = 05 marks each
Thanatology/Autopsy	05	01
<ul style="list-style-type: none">Personal identificationLegal aspect of Reproduction and sexual offences	05	02
Traumatology	10	02
<ul style="list-style-type: none">Medical Ethics & Laws related to medical manForensic Psychiatry	05	01
General Toxicology	05	01
Special Toxicology	10	02
Total	40 (40 Marks)	09 (40 Marks)

Pre-Annual/Annual Professional Exam: Practical

Practical = 80

Internal Assessment = 20

Pass Marks = 50

Gen Viva Voce		Lab Work		Internal Evaluation	Total
Internal Examiner	Ext Examiner	Practical/OSCE	Practical Notebook and Forensic Daybook marks 5+5	20	100
20	20	30			

Theory: Internal Assessment (IA) Calculation

A	B	C	D
Roll No.	Name	All Blocks/ Pre-annual Exams or any other exam	Total Marks of internal assessment Out of 20
Total Marks		Sum of Marks obtained x 20/ sum of total marks in all internal exams	

Practical: Internal Assessment Calculation

A	B	C	D
Roll No.	Name	OSCE /all practical Class tests throughout the year /Pre-annual practical Exams or any other exam	Total Marks of internal assessment Out of 20
Total Marks		Sum of Marks obtained x 20/ sum of total marks in all internal exams	

TIME TABLE:

CMH Lahore Medical College
WEEKLY TRAINING PROGRAMME OF 3rd year MBBS 2021-22 (2019-24)
 (10 Jan 2022 - 14 Jan 2022)
 (10 Jan - 14 Jan 2022 (Week 02)-In-Person)

Day	Date	TIME TABLE												
Mon	10 Jan 2022	08:00:00 - 08:50:00	08:50:00 - 09:40:00	09:40:00 - 10:30:00	10:30:00 - 10:45:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	12:30:00 - 12:40:00	12:40:00 - 13:30:00	13:30:00 - 15:00:00	13:30:00 - 15:00:00	15:00:00 - 17:00:00
		Tag Batches: All Students Pharmacology • Waqar Siddiqui	Tag Batches: All Students Pharmacology • Syed Haider	Tag Batches: All Students PATHOLOGY • Muhammad Saeed Anwar	Tag Batches: All Students 10:45:00	Tag Batches: * WB - D = 17 * WB - E = 18 * WB - F = 17 Surgery • Amna Shahab • Rashid Usman • Muhammad Wassem Anwar	Tag Batches: * WB - A = 17 * WB - B = 17 * WB - C = 18 Medicine • Saba Saif • Muhammad Arslan Javed • Anna Ashraf	Tag Batches: * WB - G = 17 * WB - J = 16 Obs & Gynaecology • Qurrat Ishaq	Tag Batches: * WB - H = 17 Paeds • Arooj Waqas	Tag Batches: All Students 12:40:00	Tag Batches: All Students Community Medicine • Muhammad Ashraf Chaudhary	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - B Pharmacology • Hira Tanveer	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - C Forensic Medicine & Toxicology • Mohsana Rana	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - A PATHOLOGY • Uzma Rihan • Fatima Zahra
Tue	11 Jan 2022	08:00:00 - 08:50:00	08:50:00 - 09:40:00	09:40:00 - 10:30:00	10:30:00 - 11:30:00	11:30:00 - 12:30:00	11:30:00 - 12:30:00	11:30:00 - 12:30:00	11:30:00 - 12:30:00	12:30:00 - 12:40:00	12:40:00 - 13:30:00	13:30:00 - 15:00:00	13:30:00 - 15:00:00	15:00:00 - 17:00:00
		Tag Batches: All Students PATHOLOGY • Uzma Rihan	Tag Batches: All Students Pharmacology • Sehrish Zaffar	Tag Batches: All Students Information Technology	Tag Batches: All Students 10:30:00 - 11:30:00	Tag Batches: * WB - D = 17 * WB - E = 18 * WB - F = 17 Surgery • Amna Shahab • Rashid Usman • Muhammad Wassem Anwar	Tag Batches: * WB - A = 17 * WB - B = 17 * WB - C = 18 Medicine • Saba Saif • Najma Perveen • Asif Khan	Tag Batches: * WB - G = 17 * WB - J = 16 Obs & Gynaecology • Riffat Sarwar	Tag Batches: * WB - H = 17 Paeds • Rabat Malik	Tag Batches: All Students 12:40:00	Tag Batches: All Students Pharmacology • Sehrish Zaffar	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - C Pharmacology • Hira Tanveer	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - A Forensic Medicine & Toxicology • Maria Safdar	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - B PATHOLOGY • Uzma Rihan • Fatima Zahra

Wed	12 Jan 2022	08:00:00 - 08:50:00	08:50:00 - 09:40:00	09:40:00 - 10:30:00	10:30:00 - 10:45:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	12:30:00 - 12:40:00	12:40:00 - 13:30:00	13:30:00 - 15:00:00	13:30:00 - 15:00:00	15:00:00 - 17:00:00
		Tag Batches: All Students Surgery • Amana Shahab	Tag Batches: All Students PATHOLOGY • Uzma Rihan	Tag Batches: All Students PATHOLOGY • Atiya Begum	Tag Batches: All Students 10:45:00	Tag Batches: * WB - D = 17 * WB - E = 18 * WB - F = 17 Surgery • Amna Shahab • Rashid Usman • Muhammad Wassem Anwar	Tag Batches: * WB - A = 17 * WB - B = 17 * WB - C = 18 Medicine • Saba Saif • Muhammad Arslan Javed • Anna Ashraf	Tag Batches: * WB - G = 17 * WB - J = 16 Obs & Gynaecology • Rehana Mohal	Tag Batches: * WB - H = 17 Paeds • Spenta Kakalia	Tag Batches: All Students 12:40:00	Tag Batches: All Students Forensic Medicine & Toxicology • Sadaf Nadir	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - A Pharmacology • Moaz Saeed	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - B Forensic Medicine & Toxicology • Anna Shahid	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - C PATHOLOGY • Fatima Hameed • Ayesha Bashir
Thu	13 Jan 2022	08:00:00 - 08:50:00	08:50:00 - 09:40:00	09:40:00 - 10:30:00	10:30:00 - 10:45:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	10:45:00 - 12:30:00	12:30:00 - 12:40:00	12:40:00 - 13:30:00	13:30:00 - 15:00:00	13:30:00 - 15:00:00	15:00:00 - 17:00:00
		Tag Batches: All Students Pharmacology • Sehrish Zaffar	Tag Batches: All Students Behavioural Sciences • Hafiza Sajjad	Tag Batches: All Students Obs & Gynaecology	Tag Batches: All Students 10:45:00	Tag Batches: * WB - D = 17 * WB - E = 18 * WB - F = 17 Surgery	Tag Batches: * WB - A = 17 * WB - B = 17 * WB - C = 18 Medicine	Tag Batches: * WB - G = 17 * WB - J = 16 Obs & Gynaecology	Tag Batches: * WB - H = 17 Paeds	Tag Batches: All Students 12:40:00	Tag Batches: All Students PATHOLOGY • Atiya Begum	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - B Pharmacology • Moaz Saeed	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - C Forensic Medicine & Toxicology • Tayyaba Tahir • Javed Khokhar • Sadaf Nadir • Salman Rana • Mohsana Rana • Anna Shahid • Bakhtawar Khan • Maria Safdar	Tag Batches: All Students 13:30:00 - 15:00:00 Practical/Tutorial Batch - A PATHOLOGY • Fatima Hameed • Ayesha Bashir

14/01/2022, 08:50

Weekly Schedule

Fri	14 Jan 2022	08:00:00 - 08:50:00	08:50:00 - 09:40:00	09:40:00 - 10:30:00	10:30:00 - 10:50:00	10:50:00 - 11:40:00	11:40:00 - 12:30:00	12:30:00 - 13:00:00	13:00:00 - 15:00:00	13:00:00 - 15:00:00
		Tag Batches: All Students Medicine • Saba Saif	Tag Batches: All Students Pharmacology • Sehrish Zaffar	Tag Batches: All Students Forensic Medicine & Toxicology • Salman Rana	Tag Batches: All Students	Tag Batches: All Students PATHOLOGY • Atiya Begum	Tag Batches: All Students PATHOLOGY • Abdus Sattar • Muhammad Saeed Anwar • Uzma Rihan • Sidra Cheema • Kanwal Cheema • Atiya Begum • Maria Farid • Amal Mehmood • Ayesha Bashir • Afa Sarwar • Fatima Zahra • Maheen Asad	Tag Batches: All Students PATHOLOGY	Tag Batches: All Students Community Medicine	Tag Batches: All Students PATHOLOGY

- All Academic Activities will be **IN-PERSON**.
- Practical Batch A (Roll No. 01 - 54), Batch B (Roll No. 55 - 106), Batch C (Roll No. 107 - onwards).

Tue - 11 Jan 2022
Mr Khurram Siddique

Dr. Rizwana Kamran
DHPE & PGS
Assistant Professor

TEACHING PROGRAM

Topics for Module – I (3rd Jan 2022 to 3rd April 2022)

S.N	Day	Date	Time	TOPIC	Teacher
1.	Tue	04.01.22	0940-1030	Forensic Medicine Introduction	Prof. Javed Iqbal Khokhar + All Staff
THANATOLOGY + GEN TOXICOLOGY					
2.	Wed	05.01.22	1240-1330	Introduction to Forensic Toxicology (Thanatology + Gen Toxicology)	Dr. Sadaf Nadir
3.	Fri	07.01.22	0940-1030	Definition, Concept, Diagnosis of Death, Norms, Classification	Prof. Javed Iqbal Khokhar
4.	Tue	11.01.22	0940-1030	Medicolegal aspects of sudden and unexpected deaths, Death Certificate	Dr. Sadaf Nadir
5.	Wed	12.01.22	1240-1330	Declaration of death, parameters, WHO criteria for declaration of death	Dr. Sadaf Nadir
6.	Fri	14.01.22	0940-1030	Gen Toxicology (Introduction + Definitions, Norms Classification)	Dr. Salman Rana
7.	Tue	18.01.22	0940-1030	Changes in body after death (Immediate + early)	Prof. Javed Iqbal Khokhar
8.	Wed	19.01.22	1240-1330	Algor Mortis	Prof. Javed Iqbal Khokhar
9.	Fri	21.01.22	0940-1030	Gen + Medicolegal Aspects of Poisons	Dr. Salman Rana
10.	Tue	25.01.22	0940-1030	Postmortem Lividity	Prof. Javed Iqbal Khokhar
11.	Wed	26.01.22	1240-1330	Rigor Mortis	Prof. Javed Iqbal Khokhar
12.	Fri	28.01.22	0940-1030	Routes of administration elimination, metabolism of poison, factors modifying the effect of poison	Dr. Salman Rana
13.	Tue	01.02.22	0940-1030	Late changes after death – (I)	Prof. Javed Iqbal Khokhar
14.	Wed	02.02.22	1240-1330	Late changes after death – (II)	Prof. Javed Iqbal Khokhar
15.	Fri	04.02.22	0940-1030	Diagnosis of poisoning in living and dead	Dr. Salman Rana
16.	Tue	08.02.22	0940-1030	Determination of postmortem interval	Dr. Sadaf Nadir
17.	Wed	09.02.22	1240-1330	Overview of Thanatology + Review	Prof. Javed Iqbal Khokhar
18.	Fri	11.02.22	0940-1030	Medicolegal management of poisoning case & Duties of RMP – (I)	Dr. Salman Rana
PERSONAL IDENTITY + TRACE EVIDENCE					
19.	Tue	15.02.22	0940-1030	Identification of living & dead (methods +parameters)	Dr. Sadaf Nadir
20.	Wed	16.02.22	1240-1330	Determination of age & its medicolegal importance	Dr. Sadaf Nadir
21.	Fri	18.02.22	0940-1030	Medicolegal management of poisoning case – (II) + Antidots, Scandinavian method, toxi drome, coma cocktail	Dr. Salman Rana
22.	Tue	22.02.22	0940-1030	Determination of Gender + M/L Importance	Dr. Sadaf Nadir

23.	Wed	23.02.22	1240-1330	Role of Forensic odontology, Forensic Anthropology + Forensic Radiology in identification – (I)	Dr. Salman Rana
24.	Fri	25.02.22	0940-1030	Role of Forensic odontology, Forensic Anthropology + Forensic Radiology in identification – (II)	Dr. Salman Rana
25.	Tue	01.03.22	0940-1030	Class Evaluation – I (General Toxicology + Thanatology)	All Staff
26.	Wed	02.03.22	1240-1330	Special Techniques in Identification (DNA Fingerprinting + Anthropometry)	Dr. Salman Rana
27.	Fri	04.03.22	0940-1030	Skull Super imposition + Facial Reconstruction	Dr. Sadaf Nadir
28.	Tue	08.03.22	0940-1030	Trace Evidence – I	Dr. Sadaf Nadir
29.	Wed	09.03.22	1240-1330	Trace Evidence – II	Dr. Sadaf Nadir
30.	Fri	11.03.22	0940-1030	Review of Personal Identity	Dr. Sadaf Nadir
31.	Tue	15.03.22	0940-1030	Class Evaluation – II (Personal Identity + Trace Evidence)	All Staff
SEXUAL OFFENSES					
32.	Wed	16.03.22	1240-1330	Impotence Sterility, Virginity	Dr. Salman Rana
33.	Fri	18.03.22	0940-1030	Pregnancy	Dr. Mohsana Rana
34.	Tue	22.03.22	0940-1030	Sexual Offenses	Dr. Sadaf Nadir
	Wed	23.03.22	Gazetted Holiday		
35.	Fri	25.03.22	0940-1030	Criminal Abortion	Dr. Sadaf Nadir
Topics for Module – II (4th Apr to 17th June 2022 & 18th to 24th July 2022)					
S.N	Day	Date	Time	TOPIC	Teacher
AUTOPSY & EXHUMATION					
36.	Tue	05.04.22	0940-1030	Introduction, Objectives, Rules and Techniques of Autopsy	Prof. Javed Iqbal Khokhar
37.	Wed	06.04.22	1240-1330	Autopsy Protocol – (I)	Prof. Javed Iqbal Khokhar
38.	Fri	08.04.22	0940-1030	Autopsy Protocol – (II)	Prof. Javed Iqbal Khokhar
39.	Tue	12.04.22	0940-1030	Autopsy on Decomposed, mutilated bodies & fragmentary remains	Prof. Javed Iqbal Khokhar
40.	Wed	13.04.22	1240-1330	Exhumation procedure stage and limitations	Dr. Sadaf Nadir
41.	Fri	15.04.22	0940-1030	Negative Autopsy & Hazard of Autopsy	Dr. Salman Rana
42.	Tue	19.04.22	0940-1030	Autopsy Room Essentials, Artifacts + Embalming	Dr. Sadaf Nadir
LAW RELATED TO MEDICAL MAN					
43.	Wed	20.04.22	1240-1330	Medicolegal Concepts of Law (Law of Courts)	Prof. Javed Iqbal Khokhar
44.	Fri	22.04.22	0940-1030	Legal Proceeding	Prof. Javed Iqbal Khokhar
45.	Tue	26.04.22	0940-1030	Legal Aspects of Medicine (PMC, & other ordinance)	Prof. Javed Iqbal Khokhar
46.	Wed	27.04.22	1240-1330	Legal aspect of Medicine (Professional Misconduct)	Dr. Sadaf Nadir

47.	Fri	29.04.22	0940-1030	Legal aspects of Medicine (consent + Med ethics)	Dr. Sadaf Nadir
48.	Fri	06.05.22	0940-1030	Medical Negligence	Prof. Javed Iqbal Khokhar
49.	Tue	10.05.22	0940-1030	Medical Evidence Professional Survey + Privileged Communication	Dr. Sadaf Nadir
50.	Wed	11.05.22	1240-1330	Medical aspects of Law (Classification of Hurt & Qatl + Hudood ordinance)	Dr. Salman Rana
51.	Fri	13.05.22	0940-1030	Medicolegal aspects of Insanity	Dr. Salman Rana
52.	Tue	17.05.22	0940-1030	Injured Person Act + Narcotic Act + Organ Transplantation Act	Prof. Javed Iqbal Khokhar
53.	Wed	18.05.22	1240-1330	Women Protection Act + Harassment Act	Dr. Sadaf Nadir
54.	Fri	20.05.22	0940-1030	Class Evaluation – I (Autopsy + Law)	All Staff
GEN TRAUMATOLOGY, FIREARM, SPECIAL TOXICOLOGY					
55.	Tue	24.05.22	0940-1030	Corrosives – (I)	Dr. Salman Rana
56.	Wed	25.05.22	1240-1330	Corrosives – (II)	Dr. Salman Rana
57.	Fri	27.05.22	0940-1030	Mechanical Injuries (Definition, Classification & Mechanics)	Prof. Javed Iqbal Khokhar
58.	Tue	31.05.22	0940-1030	Factors Modifying the appearance of wound	Prof. Javed Iqbal Khokhar
59.	Wed	01.06.22	1240-1330	Irritants (Phosphorus + Copper + Thallium)	Dr. Mohsana Rana
60.	Fri	03.06.22	0940-1030	Irritant – II (Mercury, Arsenic)	Dr. Sadaf
61.	Tue	07.06.22	0940-1030	Blunt Trauma (Abrasion Bruise + Laceration) – I	Prof. Javed Iqbal Khokhar
62.	Wed	08.06.22	1240-1330	Blunt Trauma (Abrasion Bruise + Laceration) – II	Prof. Javed Iqbal Khokhar
63.	Fri	10.06.22	0940-1030	Irritant (Snake Poisoning)	Dr. Salman Rana
64.	Tue	14.06.22	0940-1030	Incised + Stab Wound	Dr. Sadaf Nadir
65.	Wed	15.06.22	1240-1330	Fabricated, hesitational & Defense Injuries) + Confessional Torture	Dr. Sadaf Nadir
66.	Fri	17.06.22	0940-1030	Medicolegal aspects of Mechanical Injuries – I	Prof. Javed Iqbal Khokhar
SUMMER VACATIONS					
67.	Tue	19.07.22	0940-1030	Medicolegal aspects of Mechanical Injuries – II	Prof. Javed Iqbal Khokhar
68.	Wed	20.07.22	1240-1330	Road Traffic Accidents – I	Dr. Salman Rana
69.	Fri	22.07.22	0940-1030	Road Traffic Accident – II	Dr. Salman Rana
	Fri	29.07.22	2ND MODULE EXAMINATION 2022		
Topics for Module – III (1st August to 9th October 2022)					
S.N	Day	Date	Time	TOPIC	Teacher
GEN TRAUMATOLOGY, FIREARM, SPECIAL TOXICOLOGY					

70.	Tue	02.08.22	0940-1030	Firearm Injuries (Rifled Weapon)	Prof. Javed Iqbal Khokhar
71.	Wed	03.08.22	1240-1330	Firearm Injuries (Smooth bore weapon)	Prof. Javed Iqbal Khokhar
72.	Fri	05.08.22	0940-1030	Firearm Injuries (Internal ballistics)	Prof. Javed Iqbal Khokhar
73.	Wed	10.08.22	1240-1330	Blast Injuries	Prof. Javed Iqbal Khokhar
74.	Fri	12.08.22	0940-1030	Drug Addiction + Habituation + LSD Poisoning	Dr. Sadaf Nadir
ACCIDENTS IN HOME AND ENVIRONMENT					
75.	Tue	16.08.22	0940-1030	Burns (Classification & Medical Aspect)	Dr. Salman Rana
76.	Wed	17.08.22	1240-1330	Death due to electrocution + Starvation	Dr. Sadaf Nadir
77.	Fri	19.08.22	0940-1030	Death due to heat & cold	Dr. Salman Rana
78.	Tue	23.08.22	0940-1030	Violent Asphyxial Death (Classification + Gen Aspects)	Prof. Javed Iqbal Khokhar
79.	Wed	24.08.22	1240-1330	Hanging	Prof. Javed Iqbal Khokhar
80.	Fri	26.08.22	0940-1030	Strangulation	Prof. Javed Iqbal Khokhar
81.	Tue	30.08.22	0940-1030	Suffocation	Dr. Sadaf Nadir
82.	Wed	31.08.22	1240-1330	Manual Strangulation + Burking Bansdola	Dr. Sadaf Nadir
83.	Fri	02.09.22	0940-1030	Violent Asphyxial Death (Traumatic Asphyxia + Autoerotic Asphyxia)	Prof. Javed Iqbal Khokhar
84.	Tue	06.09.22	0940-1030	Drowning & its Medicolegal Aspect – I	Prof. Javed Iqbal Khokhar
85.	Wed	07.09.22	1240-1330	Drowning & its Medicolegal Aspect – II	Prof. Javed Iqbal Khokhar
86.	Fri	09.09.22	0940-1030	Inebriants (Ethyl + Methyl Alcohol)	Dr. Salman Rana
87.	Tue	13.09.22	0940-1030	Infanticide + Battered baby syndrome	Dr. Sadaf Nadir
88.	Wed	14.09.22	1240-1330	Violence on Women	Dr. Sadaf Nadir
89.	Fri	16.09.22	0940-1030	Class Evaluation – I (Accidents in Home & Environment)	All Staff
90.	Tue	20.09.22	0940-1030	Mental Health Ordinance + Moral Views in Biomedical Research	Prof. Javed Iqbal Khokhar
91.	Wed	21.09.22	1240-1330	Opium Poisoning (Somniferous poison)	Dr. Mohsana Rana
92.	Fri	23.09.22	0940-1030	Asphyxiants	Dr. Sadaf Nadir
93.	Tue	27.09.22	0940-1030	Deliriant Poisons	Dr. Salman Rana
94.	Wed	28.09.22	1240-1330	Current trends in suicidal poisoning	Dr. Sadaf Nadir

95.	Fri	30.09.22	0940-1030	Sheehsa, Glue sniffing + Date Rape Drug	Dr. Salman Rana
96.	Tue	04.10.22	0940-1030	Regional Injuries	Prof. Javed Iqbal Khokhar
97.	Wed	05.10.22	1240-1330	Sedative & Hypnotics	Dr. Sadaf Nadir
98.	Fri	07.10.22	0940-1030	Insecticide	Dr. Mohsana Rana

Forensic Medicine & Toxicology Department
CMH Lahore Medical College & IOD
Schedule for Thursdays Module-I (would be done batch-wise)
3rd January to 3rd April 2022

Sr. No	Day	Date	Topic	Name of Instructor
1.	Thu	06.01.2022	Flipped classroom – Death – Sudden (Causes)	(All Teaching Staff) Capt. Dr. Javed Iqbal Khokhar (Professor & HOD) Dr. Sadaf Nadir (Associate Professor) Dr. Salman Rana (Assistant Professor) Dr. Mohsana Rana (Demonstrator) Dr. Bakhtawar H. Khan (Demonstrator) Dr. Amna Shahid (Demonstrator) Dr. Maria Safdar (Demonstrator) Dr. Tayyaba (Demonstrator)
2.	Thu	13.01.2022	Flipped classroom – Death – Sudden (Causes)	
3.	Thu	20.01.2022	Flipped classroom – Death – Sudden (Causes)	
4.	Thu	27.01.2022	TBL – Thanatology (upto rigor mortis)	
5.	Thu	03.02.2022	TBL – General Toxicology (Routes of poisoning)	
6.	Thu	10.02.2022	TBL – All Thanatology – (Putrifaction/Mummification)	
7.	Thu	17.02.2022	Flipped – All General Toxicology	
8.	Thu	24.02.2022	TBL – Personal Identification (Forensic Radiology)	
9.	Thu	03.03.2022	TBL – DNA Fingerprinting	
10.	Thu	10.03.2022	PBL.CSI – Crime Scene Investigation (Trace Evidence)	
11.	Thu	17.03.2022	TBL – Autopsy – Types, Objectives, types of incisions	
12.	Thu	24.03.2022	PowerPoint presentations	

Forensic Medicine & Toxicology Department
CMH Lahore Medical College & IOD
Practical Schedule
3rd January to 3rd April 2022

Sr. No	Day	Date	Topic	Name of Instructor
13.	Mon	03.01.2022	Introduction to Forensic Medicine & Toxicology Presentation	Dr. Mohsana Rana
14.	Tue	04.01.2022		Dr. Maria Safdar
15.	Wed	05.01.2022		Dr. Amna Shahid
FORENSIC ANATOMY				

16.	Mon	10.01.2022	Introduction to Forensic Anatomy		Dr. Mohsana Rana		
17.	Tue	11.01.2022				Dr. Maria Safdar	
18.	Wed	12.01.2022				Dr. Amna Shahid	
Sr. No	Day	Date	Practical Topic	Name of Instructor	Tutorial Topics	Name of Instructor	
9.	Mon	17.01.2022	Determination of Sex	Dr. Mohsana Rana	Concept of Deaths	Dr. Amna Shahid	
10.	Tue	18.01.2022		Dr. Maria Safdar		Dr. Tayyaba	
11.	Wed	19.01.2022		Dr. Amna Shahid		Dr. Bakhtawar H. Khan	
12.	Mon	24.01.2022	Determination of Sex using Bones - I	Dr. Mohsana Rana	Routes & Absorption of Poisons	Dr. Bakhawar H. Khan	
13.	Tue	25.01.2022		Dr. Bakhtawar H. Khan		Dr. Tayyaba	
14.	Wed	26.01.2022		Dr. Amna Shahid		Dr. Maria Safdar	
15.	Mon	31.01.2022	Determination of Sex using Bones - II	Dr. Bakhtawar H. Khan	Methods of Identification & Importance in Forensic Medicine	Dr. Mohsana Rana	
16.	Tue	01.02.2022		Dr. Maria Safdar		Dr. Amna Shahid	
17.	Wed	02.02.2022		Dr. Tayyaba		Dr. Bakhtawar H. Khan	
18.	Mon	07.02.2022	Race & Stature Determination	Dr. Mohsana Rana	Early Changes after death	Dr. Bakhtawar H. Khan	
19.	Tue	08.02.2022		Dr. Maria Safdar		Dr. Amna Shahid	
20.	Wed	09.02.2022		Dr. Amna Shahid		Dr. Tayyaba	
FORENSIC RADIOLOGY							
21.	Mon	14.02.2022	Introduction to Forensic Radiology		Dr. Salman Rana		
22.	Tue	15.02.2022					
23.	Wed	16.02.2022					
Sr. No	Day	Date	Practical Topic	Name of Instructor	Tutorial Topics	Name of Instructor	
24.	Mon	21.02.2022	Forensic Odontology	Dr. Mohsana Rana	Management of Poisoning Case	Dr. Tayyaba	
25.	Tue	22.02.2022		Dr. Bakhtawar H. Khan		Dr. Maria Safdar	
26.	Wed	23.02.2022		Dr. Amna Shahid		Dr. Mohsana Rana	
FORENSIC SEROLOGY							
27.	Mon	28.02.2022	Determination of Blood Stains	Dr. Mohsana Rana	Legal duties of RMP in case of Poisoning	Dr. Amna Shahid	
28.	Tue	01.03.2022		Dr. Bakhtawar H. Khan		Dr. Tayyaba	
29.	Wed	02.03.2022		Dr. Tayyaba		Dr. Maria Safdar	
Sr. No	Day	Date	Practical Topic	Name of Instructor	Tutorial Topics	Name of Instructor	
30.	Mon	07.03.2022	Examination of Blood under UV Lamp	Dr. Amna Shahid	Estimation of time since death	Dr. Mohsana Rana	
31.	Tue	08.03.2022		Dr. Maria Safdar		Dr. Tayyaba	
32.	Wed	09.03.2022		Dr. Bakhtawar H. Khan		Dr. Maria Safdar	
33.	Mon	14.03.2022	Benzidine & Phenolphthalein tests	Dr. Mohsana Rana	Importance of Ossification Centers in Forensic Medicine	Dr. Bakhtawar H. Khan	
34.	Tue	15.03.2022		Dr. Bakhtawar H. Khan		Dr. Tayyaba	
35.	Wed	16.03.2022		Dr. Amna Shahid		Dr. Maria Safdar	

36.	Mon	21.03.2022	Teichman + Takayama tests	Dr. Maria Safdar	Autopsy & it's types	Dr. Maria Safdar
37.	Tue	22.03.2022		Dr. Tayyaba		Dr. Tayyaba
38.	Wed	23.03.2022		Dr. Amna Shahid		Dr. Amna Shahid
39.	Mon	28.03.2022	Spectroscopy + Precipitin Tests		Dr. Mohsana Rana	
40.	Tue	29.03.2022			Dr. Maria Safdar	
41.	Wed	30.03.2022			Dr. Bakhtawar H. Khan	

Forensic Medicine & Toxicology Department
CMH Lahore Medical College & IOD
Practical Schedule of Module – II – 2022
4th April to 17th June 2022 & 18th to 24th July 2022

Sr. No	Day	Date	Topic	Name of Instructor
1.	Mon	04.04.2022	Microscopic Examination of Blood	Dr. Mohsana Rana
2.	Tue	05.04.2022		Dr. Tayyaba Tahir
3.	Wed	06.04.2022		Dr. Maria Safdar
4.	Mon	11.04.2022	Serological Examination of Blood	Dr. Mohsana Rana
5.	Tue	12.04.2022		Dr. Amna Shahid
6.	Wed	13.04.2022		Dr. Tayyaba Tahir
7.	Mon	18.04.2022	Examination of seminal Stains	Dr. Mohsana Rana
8.	Tue	19.04.2022		Dr. Maria Safdar
9.	Wed	20.04.2022		Dr. Bakhtawar Huma Khan
10.	Mon	25.04.2022	Examination of Hair	Dr. Amna Shahid
11.	Tue	26.04.2022		Dr. Maria Safdar
12.	Wed	27.04.2022		Dr. Tayyaba Tahir
13.	Mon	09.05.2022	AUTOPSY VISIT	All Faculty
14.	Tue	10.05.2022		
15.	Wed	11.05.2022		
16.	Mon	16.05.2022		
17.	Tue	17.05.2022		
18.	Wed	18.05.2022		
ANALYTICAL SECTION				
19.	Mon	23.05.2022	Examination of the Stomach Contents	Dr. Bakhtawar Huma Khan
20.	Tue	24.05.2022		Dr. Tayyaba Tahir
21.	Wed	25.05.2022		Dr. Maria Safdar
22.	Mon	30.05.2022	Detection of Metallic Poisons (RE INSCH TEST)	Dr. Mohsana Rana
23.	Tue	31.05.2022		Dr. Amna Shahid
24.	Wed	01.06.2022		Dr. Maria Safdar
25.	Mon	06.06.2022	Steam Distillation	Dr. Bakhtawar Huma Khan
26.	Tue	07.06.2022		Dr. Maria Safdar
27.	Wed	08.06.2022		Dr. Tayyaba Tahir
28.	Mon	13.06.2022	Stas OTTO	Dr. Mohsana Rana
29.	Tue	14.06.2022		Dr. Amna Shahid
30.	Wed	15.06.2022		Dr. Tayyaba Tahir
31.	Mon	18.07.2022	Thin Layer Chromatography TLC	Dr. Mohsana Rana
32.	Tue	19.07.2022		Dr. Maria Safdar
33.	Wed	20.07.2022		Dr. Tayyaba Tahir

Forensic Medicine & Toxicology Department
CMH Lahore Medical College & IOD
Practical Schedule of Module – III – 2022
1st August to 9th October 2022

Sr. No	Day	Date	Topic	Name of Instructor
1.	Mon	01.08.2022	Analytical Portion Vegetable Poisons	Dr. Bakhtawar Huma Khan
2.	Tue	02.08.2022		Dr. Maria Safdar
3.	Wed	03.08.2022		Dr. Tayyaba Tahir
4.	Mon	08.08.2022	Cardiac Poisons	Dr. Mohsana Rana
5.	Tue	09.08.2022		Dr. Maria Safdar
6.	Wed	10.08.2022		Dr. Amna Shahid
7.	Mon	15.08.2022	Aspirin & Paracetamol Poisoning	Dr. Mohsana Rana
8.	Tue	16.08.2022		Dr. Maria Safdar
9.	Wed	17.08.2022		Dr. Tayyaba Tahir
10.	Mon	22.08.2022	Spinal Poisons	Dr. Mohsana Rana
11.	Tue	23.08.2022		Dr. Bakhtawar Huma Khan
12.	Wed	24.08.2022		Dr. Tayyaba Tahir
13.	Mon	29.08.2022	FUELS	Dr. Amna Shahid
14.	Tue	30.08.2022		Dr. Maria Safdar
15.	Wed	31.08.2022		Dr. Tayyaba Tahir
16.	Mon	05.09.2022	Overview of Irritant Poisons	All Teaching Staff
17.	Tue	06.09.2022		
18.	Wed	07.09.2022		
19.	Mon	12.09.2022	Violent Asphyxial Deaths	Dr. Sadaf Nadir
20.	Tue	13.09.2022		
21.	Wed	14.09.2022		
22.	Mon	19.09.2022	Firearm Injuries	Prof. Javed Iqbal Khokhar Dr. Salman Rana
23.	Tue	20.09.2022		
24.	Wed	21.09.2022		
25.	Mon	26.09.2022	Paractical Revision of all 03 Modules (Slides + Models)	All Teaching Staff
26.	Tue	27.09.2022		
27.	Wed	28.09.2022		
28.	Mon	03.10.2022	Revision OSPE	All Teaching Staff
29.	Tue	04.10.2022		
30.	Wed	05.10.2022		

LEARNING METHODOLOGY:

- a) Theory in the form of Lectures, using Audio-Visual aids
- b) Practical Training in the form of Lab. Drill, PBL, Interactive Tutorials, Presentations, Role Plays given to students .
- c) Periodical Evaluations (Provide feedback and Assess Adequacy of learning)

Theory Lectures:



Practical Demonstrations in the Lab / Museum:



ROLE PLAYS BY STUDENTS:



Posting in Autopsy Rooms and Medico-legal Clinic at AIMC / KEMU:



Field Visit (Punjab Forensic Science Agency Lahore):





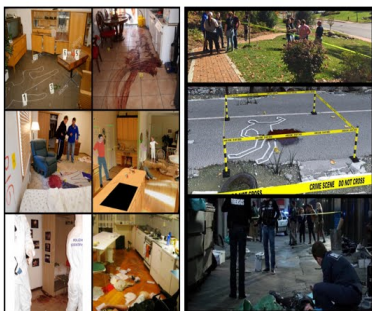
PROBLEM BASED LEARNING (PBL SAMPLES)

PBL – II

3rd YEAR MBBS (FORENSIC MEDICINE & TOXICOLOGY)

Case Scenario: CRIME SCENE INVESTIGATION

At 1:00 AM on March 18th officers responded to 133-N, DHA Lahore in reference to a 1122 and 15 call by a neighbor who heard shots fired at this address. When officers arrived at the scene they found evidence of crime. The officers notified Homicide detectives and the PFSA Crime Scene Unit.



Learning Objectives:

To learn about importance of Crime Scene Investigation, its objectives, strategies and role of various experts in a Crime Scene Unit.

Learning Exercises:

- 1- What is the purpose of Crime Scene Investigation (CSI)
- 2- Who are the experts included in a Crime Scene Unit.
- 3- What are the basic stages of Crime Scene Investigation.
- 4- Explain the working and objective in each stage of CSI.
- 5- What is the universally accepted principal of transportation of dead body from the scene so that no evidence is lost.

Learning Resources:

- 1- INTERNET.
- 2- Forensic science it's application in crime investigation (Library).

PBL: IV (2018-19)

CASE SCENARIO:

Domestic Violence

The dead body of a moderately built female was brought to the mortuary for autopsy examination.

On examination bruises and abrasions of varying sizes, shapes and colour were present on different parts of the body. Diffuse swelling over vault of skull was seen and on opening of skull, subdural and extradural haemorrhage over both cerebral hemispheres observed. Fracture of base of skull and C-5 and C-6 notes. All other organs were normal, lungs were congested.

On investigation it was found that there was constant history of beatings at the hand of her husband due to substance abuse and unemployment. There was constant pressure for demand of money on the lady's family since their marriage of 3 years and a suicide note was recovered from her room at her parents house from where she jumped out from balcony leading to head injury.



Learning objectives:

- To understand domestic and gender-based violence that women face throughout their lives and gain information regarding the laws in place that provide females' safety in our society. To learn about the doctor's role in assessing and counselling victims of domestic violence.

Learning Exercise:

- Q1. Explain the cause of death in the given scenario.
- Q2. Define domestic violence.
- Q3. Describe the epidemiology and enlist the risk factors that lead to domestic violence.
- Q4. Domestic violence tends to be largely unreported, what is the underlying cause of this.
- Q5. What are the important steps in the physical and psychological examination of victims.
- Q6. Describe some prophylactic measure in spreading awareness and preventing domestic violence.

Learning Resources:

1. Internet

PBL: I (2018-19)

CASE SCENARIO:

Confessional Torture Injuries and Custody related Torture and Death

A wealthy family was robbed during the night. The police suspected an inside job and the driver who lived with the family was taken into custody for investigation. He confessed to be an informant to the armed robbers while in police custody but during court proceedings he alleged that he had made the confession only due to police torture.



Learning objective:

- To learn about the importance of torture as a global health issue and the doctor's role in assessing the consistency between allegations and medical findings.

Learning Exercise:

- What is the aim and justification of confessional torture.
- What is its prevalence in Pakistan and around the world.
- Describe some common methods employed to inflict confessional torture.
- Correlate physical and psychological findings with confessional torture on medical examination and at autopsy.
- What is the role of a medical practitioner in the investigation of such injuries.
- Enlist and briefly describe the steps of collecting evidence of alleged torture cases.
- Explain the role of medical complicity in such a scenario.

Learning Resources:

- Internet
- Textbook of Forensic Medicine and Toxicology by Krishan Vij

Interactive Tutorials, Model and Poster Presentation:





FORENSIC MEDICINE
- Crime Scene Investigation

• Sahar Abdul Rauf	- 122	• Anum Sadia	- 155
• Syeda Rubab Fatima	- 134		
• Nisha Hassan	- 147		
• Uswah Ilyas	- 148		
• Wjrecha tu2 Zahra	- 149		

CLUES SEEN AT THE SCENE

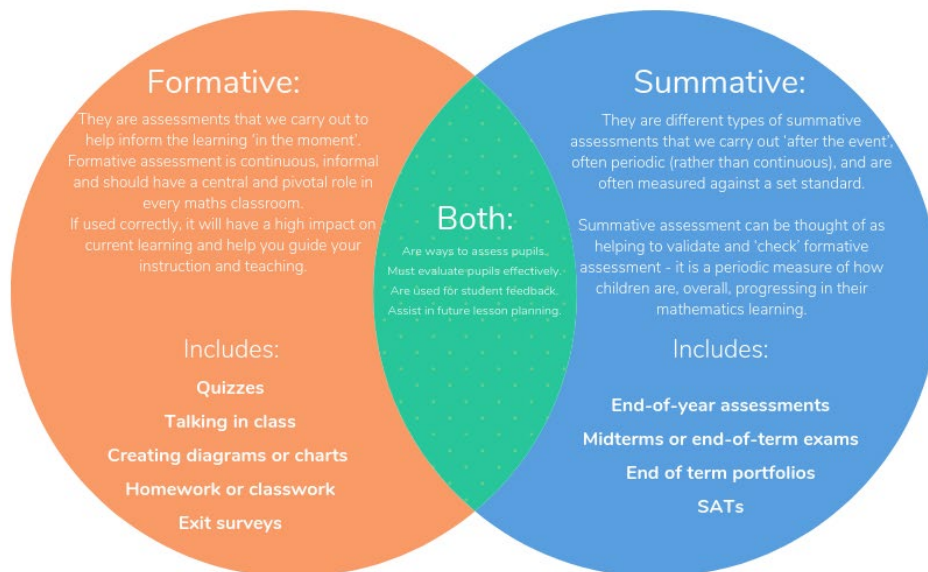
- Hanging body
- Broken Jar
- Broken Frame
- Hole in Frame
- Miscelaneous things
- Broken Jar
- Broken Rope
- Shoe Marks

CRIME SCENE DO NOT CROSS

Periodical Evaluations & Assessment:

1) FORMATIVE ASSESMENT

2) SUMMATIVE ASSESMENT



**"When the cook tastes the soup,
that's formative assessment; when
the customer tastes the soup,
that's summative assessment."**

Paul Black



FORMATIVE ASSESMENT TOOLS USED :

Class evaluations in the form of SEQ,MCQ , tutorials, group vivas with feedback to improve , quizzes , Modules Exams ,poster presentations , role plays, field visits , puzzles, feedbacks , interactive sessions, OSPE.

SUMMATIVE ASSESMENT TOOLS USED :

Sendup Exams , Nums Annual Exams with Vivas



Practical work includes:

1. FORENSIC MEDICINE

- Viewing of Medico Legal Autopsies
- Medicolegal Examinations of injured
- Age Certification
- Examination of Biological Materials (Blood, Semen, Saliva, Hair, etc.)
- Study of Bones for determination of Age, Sex, Race, Stature, Time and Medico legal aspects
- Study of Radiographs for determination of Age, Sex, Foreign bodies, trauma, deformities etc.

2. TOXICOLOGY

- Identification of Poisons
- Identification of Instruments/Equipment used in analytical techniques

Museum Forensic Medicine Department:

MODELS:

- 1- Self-Inflicted Fabricated wounds
- 2- Cut nose
- 3- Manual Strangulation(Throttling)
- 4- Contusion
- 5- Nail marks on neck
- 6- Defense Wound
- 7- Cut throat
- 8- Washer Woman's Foot
- 9- Stomach (corrosion)
- 10- Stab wound
- 11- Larynx, pharynx & esophagus
- 12- Finger Prints Patterns
- 13- Vitriolage
- 14- Hanging (ligature mark)
- 15- Wet Drowning
- 16- Post mortem Lividity
- 17- Gunshot wound (contact)
- 18- Gunshot exit wound
- 19- Gunshot on chest (collar of abrasion)
- 20- Gunshot pallet dispersion
- 21- Incised wound
- 22- Lacerated wound
- 23- Hanging
- 24- Electric Burn
- 25- Defense wounds

- 26- Avulsion
- 27- Multiple incised wounds with tailing phenomenon
- 28- Adepocere formation
- 29- Adepocere Formation
- 30- Putrefaction with maggot infestation
- 31- Putrefaction with ballottement
- 32- Mummification
- 33- Scald
- 34- Electric burn (high voltage)
- 35- Adepocere formation
- 36- Steering wheel injury
- 37- Nitric Acid burn.

List of Specimen:

S. No	Items	Quantity
a) Poisons		
1.	Oleander Leaves	
2.	Kerosene Oil	
3.	Calotropins (Madar)	
4.	Hydrochloric Acid	
5.	Sulphuric Acid	
6.	Nitric Acid	
7.	Ethyl Alcohol	
8.	Arsenic	
9.	Nux Vomica Seeds	
10.	Capsicum Seeds	
11.	Abrus Precatorius (Ratti Seeds)	
12.	Castor Oil Seeds	
13.	Croton Seeds	
14.	Bhang Leaves	
15.	Poppy	
16.	Tobacco	
17.	Nitric Acid Crystals	
18.	Mercury	
19.	Aconite	
20.	Datura Seeds	
21.	CUSO ₄	
22.	5 Specimen of Snakes	
b) Autopsy Instruments		
1.	Hand Saw	
2.	Hooks with Retractor	
3.	Knife	
4.	Scalp Retractor	
5.	Catlin	
6.	Axe	
7.	Mallet (Hammed)	
8.	Curved Forceps with Lock	
9.	Plan Forceps	
10.	Forceps (3)	
11.	Needle Holder	
12.	Curved Artery Forceps	
13.	Straight Artery Forceps	
14.	Chisel	
15.	Mayo Scissors	

S. No	Items	Quantity
c) Bones & Skeleton		
1.	Skull	02
2.	Pelvis	02
3.	Sacrum	02
4.	Sternum	02
5.	Clavicle	04
6.	Scapulae	04
7.	Radius	4
8.	Ulna	4
9.	Humerus	4
10.	Femur	4
11.	Tibia	4
12.	Fibula	4
13.	Mandible	02
14.	Male Skeleton Complete	01
15.	Female Skeleton Complete	01

Dura Pictures:

S. No	Items
1.	Electric burn on foot.
2.	Electric burn on hand and arm.
3.	Electric Burn entry wound on foot.
4.	Graze on thigh (Friction Abrasion).
5.	Nail mark on neck and upper part of chest (A case of throttling).
6.	Cadaveric spasm – Hair grasped in hands + defense wound.
7.	A case of poisoning.
8.	Corrosive burn (Ingestion of acid). - Staining of lips & charring. - Chalky white teeth.
9.	Corrosive burn – spillage of acid on chest.
10.	Corrosive burn – spillage of acid on thighs.
11.	Bruises on buttocks (Police torture case).
12.	Bite mark on cloths.
13.	Bite marks on cloths chest corresponding with marks on cloths.
14.	Avulsion.
15.	Gun Shot entry wound on forehead.
16.	A case of suicide – multiple hesitation cuts on forearm.
17.	Defense wounds.
18.	Multiple stab wounds on chest with weapon in situ.
19.	Homicidal cut throat.
20.	Old healed fabricated wounds.

S. No	Items
21.	Black eye.
22.	Contusion of kidney.
23.	Contusion of liver and viscera.
24.	Close Gun Shot entry wound with blackening.
25.	Gun Shot entry wound.
26.	Depressed fracture (signature fracture).
27.	Gun Shot exit wound on skull.
28.	Gun Shot entry wound with blackening on clothes.
29.	Gun Shot entry wound with blackening on body of victim.
30.	Gun Shot exit wound on the back of victim.
31.	Heroin capsule in stomach (body packer system).
32.	A case of hanging
33.	A case of ligature strangulation (tied hands, mouth tied, congestion of face).
34.	Occupational Injury – Traumatic death.
35.	Putrefaction with maggot's infestation.
36.	Post mortem artifact.
37.	Ligature strangulation.
38.	Manual Strangulation – Bruises on neck.
39.	Case of ligature strangulation (homicide).
40.	Gun Shot wound with tattooing.
41.	Gunshot entry wound on chin, bruise on eye due to fall on ground.
42.	Star shaped gun shaped entry wound.
43.	Gun shaped entry wound.
44.	Gunshot entry wound showing correspondence on all clothes.
45.	Gunshot (smooth bored) pallet dispersion on clothes.
46.	Gunshot (smooth bored) pallet dispersion on body.
47.	Radiograph of the same person showing multiple pallets.
48.	Putrefaction – Ballotement with skin slip.
49.	Scalds.
50.	Third degree burn with pugilistic attitude.
51.	Putrefied dead bodies of a girl and boy recovered from a truck.
52.	Ligature strangulation.
53.	Hanging.
54.	Homicidal cut throat.
55.	Gunshot entry wound with tattooing.
56.	Fracture of hyoid with bruising and hemorrhages at the side of fracture.
57.	Heroin capsule in stomach (Body Packer)
58.	Heroin capsule in stomach (Body Packer)
59.	Dead body of a foetus with placenta.
60.	A primary autopsy incision (I – shaped incision).
61.	Ligature mark of along with marbling.
62.	Incised wound with sharp edge weapon on head.
63.	Multiple bruises on legs.
64.	Stab wounds on chest with weapon in situ.
65.	Third degree burn (complete burning).

66.	Skeletal remains – M/L important –age, origin, race, cause of death can be assessed.
67.	Friction abrasion on leg.
68.	Tentative marks on fore arm.
69.	Mummification.
70.	Putrefaction with ballottement and skin slip.
71.	Burn on feet – degloving appearance.
72.	Putrefaction with maggots infestation.
73.	Empty cartridge with percussion impression.
74.	Exit wound on skull.
75.	Entry wounds on skull.
76.	Cadaveric spasm with weeds in hands (case of drowning).
77.	Case of bomb explosion → face of suicidal bomber with blackening.
78.	Case of bomb explosion → face of suicidal bomber with wasted blackening.
79.	Fabricated wound on chest (self-inflicted)

Photo Transparencies:

S. No	Items
1.	Putrefaction (Maggots / Larva / Infestation)
2.	Fire Arm Injury
3.	Dead bodies recovered from truck (1 male and 1 female)
4.	Gunshot wound
5.	Post mortem lividity
6.	Burnt body with augmented breast
7.	Ligature strangulation with marbling
8.	Near gunshot wound on temporal region
9.	Cut throat
10.	Ligature strangulation
11.	Third degree burn
12.	Burn
13.	Gunshot (entry wound)
14.	Putrefaction (Ballotement)
15.	Stab wound with weapon in situ
16.	Entry wound (gunshot)
17.	Mummification
18.	Heroin capsule in stomach (Body packer syndrome)
19.	Fire arm injury
20.	Body packer's
21.	Self-inflicted fabricated wound
22.	Empty cartridge with percussion impression
23.	Prim autopsy incision (I – shaped)
24.	Exhumed skeletal remains
25.	Multiple stab wounds on chest and abdomen
26.	Homicidal cut throat
27.	Victim of bomb explosion (head ground) with injuries
28.	Cadaveric spasm (case of drowning)
29.	Multiple bruises on legs
30.	Empty wound (gunshot) skull
31.	Putrefaction with ballotement, skin slip, marbling
32.	Case of hanging
33.	Burn with degloving of feet
34.	Blunt weapon injury on head
35.	Rigor mortis
36.	Dead fetus with placenta
37.	Burn with breast augmentation
38.	Suicidal bomber with blackening
39.	Blunt weapon lacerated injury on head
40.	Third degree burn
41.	Suicidal bomber with washed blackening
42.	Dead body id distorted by animals

S. No	Items
43.	Body of suicidal bomber
44.	Dead fetus with placenta card attached
45.	Stellate shape contact wound
46.	Entry wound (gunshot)
47.	Breast implant
48.	Tattooing on arm
49.	Fracture of hyoid with bruises and hemorrhage
50.	Tentative cut (hesitation cut)
51.	Collection of viscera for Histochemical during autopsy
52.	Tentative cuts on forearm (suicidal attempt)
53.	Throttling
54.	Gun shot with tattooing
55.	Post mortem lividity
56.	Ligature strangulation
57.	Stab wound on abdomen
58.	Homicidal cut throat
59.	Gun shot with tattooing on head
60.	Gun shot with tattooing on abdomen
61.	Multiple stab wound on body of a female
62.	Post mortem lividity
63.	Gunshot wound on head with blackening and tattooing
64.	Ligature strangulation with hand tied
65.	Heroin capsule in stomach
66.	Entry wound in skull
67.	Self-inflicted wound
68.	Homicidal cut throat
69.	Putrefaction with ballottement
70.	Gunshot entry wound (close contact) on skull
71.	Gunshot (smooth bored) wound
72.	Ligature strangulation with cloth
73.	Gunshot entry wound with tattooing
74.	Fracture of hyoid
75.	Stab wound on abdomen
76.	Defense wound on hand
77.	Gunshot entry wound
78.	Extramural hematoma
79.	Hanging ligature mark
80.	Marbling
81.	Hanging
82.	Homicidal cut throat
83.	Electric burn on feet
84.	Incised wound on head with weapon in situ
85.	Homicidal cut throat
86.	Homicidal cut throat
87.	Fracture of hyoid with Hemorrhage at the site of fracture
88.	Putrefaction with maggots infester
89.	Putrefaction with skin slip and ballottement

S. No	Items
90.	Self-inflicted fabricated wound
91.	Gunshot wound with tattooing
92.	Gunshot entry wound skull
93.	Stab wounds on the body of female and male
94.	Incised wound, stab wound, weapon in situ
95.	Firm entry wound
96.	Heroin capsules
97.	A case of burn
98.	Tentative cuts
99.	Putrefaction with post mortem blister formation
100.	Gunshot entry wound
101.	Fire arm (gunshot) entry wound with tattooing
102.	Gunshot entry wound tattooing
103.	Ligature strangulation with signs of asphyxia
104.	Case of sexual assault
105.	Fracture of mandible
106.	Fire arm (gunshot) entry wound
107.	Heroin capsule in stomach
108.	Tattooing mark with keloid formation
109.	Hog lie
110.	Ligature strangulation
111.	Gunshot wound with tattooing
112.	Hanging
113.	A case of poisoning
114.	Gunshot wound
115.	Close contact (gunshot) with blackening
116.	Gunshot entry wound
117.	Gunshot entry wound tattooing
118.	Gunshot entry wound tattooing
119.	Homicidal cut throat
120.	fracture of hyoid
121.	Heroin capsule in stomach
122.	Gunshot entry wound
123.	Gunshot entry wound with tattooing
124.	Electric burn
125.	Homicidal cut throat
126.	Defense wound on hand
127.	Electric burn
128.	Gunshot (close contact) entry wound with blackening
129.	Hanging
130.	Self-inflicted wound
131.	Third degree burn
132.	Gunshot entry wound with blackening (close contact)
133.	Putrefaction
134.	Hanging
135.	Homicidal cut throat
136.	Defense wound on hand

S. No	Items
137.	Strangulation
138.	Putrefaction with maggots infestation
139.	Hanging
140.	A case of explosion
141.	Post mortem lividity
142.	Dead foetus with placenta
143.	Ligature strangulation
144.	Gunshot wound (smooth bored)
145.	A case of throttling
146.	Gunshot entry wound
147.	Gunshot entry wound
148.	Corrosive burn
149.	Ligature strangulation
150.	Gunshot entry wound with tattooing
151.	Gunshot exit wound
152.	Ligature mark hanging
153.	Gunshot entry wound
154.	Self-inflicted fabricated wound
155.	Industrial death
156.	Gunshot entry wound
157.	Putrefaction with maggots and flies' infestation
158.	Gunshot entry wound
159.	Incised wound on chin
160.	Fracture of hyoid bone
161.	Electric burn
162.	Ligature strangulation
163.	Gunshot entry wound
164.	Ligature strangulation
165.	Fracture of hyoid bone

Medico Legal X-Rays:

- Fracture of Hyoid Bone
- X-Ray Knee Joint
 - MLA----- epiphysial end are not fused with the shaft. Age = > 18 years
- X-Ray Ankle Joint
 - MLA----- epiphysial end are fused with the shaft. Age = > 21 years
- X-Ray Wrist Joint
 - Ossification centers of 4 carpal bones appeared. Age = 4 years
- X-Ray Wrist Joint
 - Ossification centers for 3 carpal bones appeared. Age = 3 years
- X-Ray Wrist Joint
 - Ossification centers for 7 carpal bones appeared.
 - Ossification center for pisiform bone not appeared.
 - Epiphysial end not fused with the shaft
 - MLA----- age b/w 7-12 years.
- X-Ray Wrist Joint
 - Ossification centers for all carpal bones appeared including pisiform bone.
 - Epiphysial end are fused with the shaft. Age = 14 – 15 years
- X-Ray Wrist Joint (lateral view)
 - MLA----- Distal end of radius and ulna are fused. Age = 14 – 15 years
- X-Ray Wrist Joint
 - Ossification centers of 4 carpal bones appeared.
 - Distal end of radius and ulna not fused
 - MLA----- Age 4 years
- X-Ray Pelvic including Hip Joint (AP view)
 - Iliac crest not fused with the body
 - Greater Trochanter is not fused with the neck of femur
 - Angle of neck of femur is 90 degree
 - MLA----- age = 17 – 18 years, sex = female
- X-Ray Knee Joint
 - Epiphysial end are fused with the shaft. Age = 18 – 19 years
- X-Ray Skull (lateral view)
- X-Ray Skull (AP view)
 - Multiple foreign bodies
 - MLA----- Case of smooth bore pallet impression
- X-Ray Skull (lateral view)
 - Foreign body in temporo-occipital region
 - MLA-----case of refilled Firearm. Piece of bullet in the skull

- X-Ray Foetus
- X-Ray Foetus
- X-Ray Foetus
- X-Ray Tibia, Humerus, Femur
 - Distal end of long bones have fused with the shaft
 - MLA----- age b/w 19 – 25 years
- X-Ray Radius Ulna
 - Fracture of distal 1/3rd of shaft of ulna
 - MLA----- GURH GHIYAR JAIFA MUNNAQUILAH
- X-Ray Radius, Ulna and Femur
 - Distal ends are not fused with the shaft
 - Greater Trochanter is not fused with neck of femur
 - MLA----- Age = less than 17 years
- X-Ray Chest (PA View)
 - Foreign body in chest
 - MLA----- case of rifled Fire Arm Bullet and gunpowder residue in the chest cavit
- X-Ray Calvicle and Sternum
- X-Ray Shoulder Joint
- X-Ray Skull, Sternum, Clavicle

LIST OF BOOKS FORENSIC MEDICINE:

Sr. No.	Title of Book	Author
1	Forensic Emergency Medicine	Jonathan S
2	Analytical and Practical Aspects of Drug Testing in Hair	Kintz, Pascal
3	Forensic Science the Basics	Jay A. Siegel
4	Textbook of Forensic Medicine and Toxicology	Krishan Vij
5	Concise Textbook of Forensic Medicine and Toxicology	R.K. Sharma
6	Practical Forensic Medicine	Nagesh Kumar
7	Ballistic Trauma: A Practical Guide	Peter F. Mahoney
8	Handbook of Forensic Pathology	Vincent J.M DeMaio
9	Encyclopedia of Forensic Science	Suzanne bell
10	Principals of Forensic Medicine	Apurba Nandy
11	Parikh's Textbook of Medical Jurisprudence, Forensic Medicine...	Parikh, C. K
12	Forensic Entomology and Introduction	Dorothy
13	Gold frank's Toxicology Emergencies	Elomanbaum
14	Forensic DNA Analysis	J Thomas
15	Comprehensive Medical Toxicology	Pillay
16	Forensic Science it's Application in Crime Investigation	Bapuly
17	Textbook of Forensic Medicine and Toxicology	Pillay
18	Color Atlas of Forensic Pathology	Jay Dix
19	Forensic DNA Typing Biology Technology	John M Butler
20	Forensic Science the Basic	Jay A Siegel
21	Gold frank's Manual of Toxicology	Robert S Hoffman
22	Gunshot's Wounds Practical Aspects of Fireman	Vincent
23	Knight's Forensic Pathology	Peeka Sukho
24	Smart Study Series: Forensic Medicine And Toxicology	Aggararwal, Gaurav
25	Smart Study Series: Forensic Medicine & Toxicology	Aggarwal, Gaurav
26	Textbook of Forensic Medicine and Toxicology	Vij, Krishan
27	Simpson's Forensic Medicine	Shepherd, Richard
28	Textbook of Forensic Medicine & Toxicology	Dikhit P.C
29	Forensic Pathology	DeMaio, Vincent J
30	Practical Bomb Scene Investigation	Thurman, James T
31	The Virtopsy Approach	Thali, Michael J
32	Forensic DNA Analysis	McClintock, Thomas J
33	Principles and Practice of Forensic Medicine	Awan, Nasib R.
34	Textbook of Forensic Medicine and Toxicology	Vij, Krishan
35	Textbook of Forensic Medicine and Toxicology	Dikshit, P C
36	Atlas of Forensic Pathology	Shetty, B Suresh Kumar.
37	Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology	Subrahmanyam, BV
38	Forensic Medicine & Toxicology	Aggarwal, Gaurav.
39	Textbook of Forensic Medicine and Toxicology	Vij, Krishan.
40	Child Forensic Psychology	Holliday, Robyn E.

Sample Paper SEQ:

CMH Lahore Medical College, Department of Forensic Medicine & Toxicology,

Q. No	Part	Question	Topic
01		What is Spark Electrical lesion. Explain with the help of a diagrammatic sketch.	Accidents in Home & Environment
02		The dead body of an adult male dying suddenly under suspicious circumstance was disposed of by the family. After few months, on complaint of the spouse, orders for exhumations were passed by the court. Under what situations such orders are issued. What is the scope and limitations of the procedure.	Autopsy and Exhumation
03		Blood groups are inherited obeying Mendelian's laws of inheritance. State the two laws that govern the inheritance of blood groups. Write forensic applications of blood grouping.	Personal Identity & Trace Evidence

Q. 1 **KEY**

Key: - Spark Electrical Lesion

Loose contact, low voltage lesion

- Dry, Pitted lesion
- Central, Pitted black spot due to metallization
- Surrounded by white parchment zone
- Surrounded by peripheral hyperactive zone

(05)

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 103)

Topic: Accidents in Home & Environment

Q. 2 **KEY**

1- where initial autopsy has not been done

2- Where initial autopsy has been conducted but to the dis-satisfaction of either party. (1)

Limitations: -

- Soft tissue injury cannot be elicited and should not be commented upon.
- Microscopic examination is of no value & no opinion about A/M or P/M nature of injury
- Organic, Vegetable, Volatile and Synthetic poisons very difficult to detect. (2)

Scope: -

- Finding in hard and keratin tissue
- Foreign bodies, metallic and other
- Inorganic metallic poisons (value corroborative mostly) (2)

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 128)

Topic: Autopsy and Exhumation

Q. 3 **KEY**

Key: - 1. Blood group gene cannot appear in child unless present in one or both parents

2. If one of the parents is Homozygous for a particular blood group gene, it must appear in blood group of child Examples. (3)

ML Significant

- _i) Problems of disputed paternity
- ii) Problems of disputed identity
- iii) Ascertain source of blood in physical and sexual assault cases. (2)

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 149)

Textbook of Medical Jurisprudence & Toxicology by Parekh (P: 616)

Topic: Personal Identity & Trace Evidence

Sample Paper MCQ:

MCQ 1) A fact or information after its presentation to court of law by a witness is called

- a) Evidence
- b) Inquiry
- c) Testimony
- d) Declaration
- e) Complaint

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 06)

MCQ 2) A written statement given on oath, before any person authorized to administer an oath is called :

- a) Declaration
- b) Affidavit
- c) Oath
- d) Evidence
- e) Cross examination

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 09)

MCQ 6) The best parameter to calculate post mortem interval is :

- a) Rate of cooling of body
- b) Cadaveric lividity
- c) Cadaveric rigidity
- d) Putrefaction
- e) Cadaveric spasm

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 21)

MCQ 7) Rate of decomposition is faster in following order :

- a) Air > water > soil
- b) Water > air > soil
- c) Soil > air > water
- d) Water > soil > air
- e) Air > soil > water

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 21)

MCQ 9) The characteristic feature of incised wound is :

- a) Length is the greatest dimension
- b) Breadth is the greatest dimension

- c) **Tissues running across base of wound**
- d) **Crushing of hair**
- e) **Blurred margins**

Reference:- Textbook of Medical Jurisprudence & Toxicology by Parekh (P: 221 ed 7)

MCQ 10) Dry pitted lesion , varying in size , with central white parchment zone, surrounded by hyperemic zone is known as

- a) **Spark burn**
- b) **Flash burn**
- c) **Lightening burn**
- d) **Arcing phenomena**
- e) **Sledge hammer effect**

Reference: - Principles & Practice of Forensic Medicine by Nasib R. Awan (P: 64)

KEYS :

MCQ 1 = C

MCQ 2 = B

MCQ 6 = A

MCQ 7 = A

MCQ 9 = A

MCQ 10 = A