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**CURRICULUM  
FOR  
2 YEARS DIPLOMA PROGRAMME  
IN  
MEDICAL JURISPRUDENCE  
(DMJ)**



**2008**

**UNIVERSITY OF HEALTH SCIENCES  
LAHORE, PAKISTAN**

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# FOREWORD

University of Health Sciences (UHS) Lahore was inaugurated by the President of Pakistan on the 3<sup>rd</sup> of October 2002 with the vision to explicitly address academic and research needs in the field of health sciences and allied disciplines and to uplift their existing level to bring them on a par with the international standards.

The mission of the University is to develop an intellectual nexus to provide excellence and innovation in medical education and research in order to;

- Impart knowledge and skills to health care providers to enhance their competence in providing community oriented and multi-disciplinary patient-centered care
- Train and produce researchers and specialists in basic and clinical medical sciences
- Establish and maintain continuing professional development programmes for the faculty
- Provide trained professionals and scientists/researchers for the field of Electro Medical/Bio-Medical disciplines
- Assure quality in health education and research at all levels

A university is the zenith of knowledge that imparts quality education and awards degrees for extensive educational attainments in various disciplines with attendant advancement for the development of intellectual community. Protection of traditional knowledge, making exploration about it and obtaining deep understanding of modern technology and research techniques are some of the responsibilities of any university.

UHS is running a number of courses in the field of health sciences in Punjab. The list extends from undergraduate level courses up to the doctorate level both in basic, clinical and allied health sciences.

Since its inception, certain vital tasks were taken into serious consideration by UHS, for instance, curricula development and their up-gradation were among the most important ones besides introduction of contemporary educational programmes.

UHS has revised and finalized curricula for undergraduate Medical/Dental Education, BSc Nursing, and Allied Health Sciences.

In keeping with its commitment for further improvement in the standard of medical education, UHS has taken an initiative to modify and improve one year postgraduate diploma courses to 2 years structured training programmes.

I do not believe in selling an old product in a new packing with a fresh label on it, just to do the job. Original products with actual outcomes for the society must be guaranteed. Being the Vice Chancellor of a public sector health university, I believe, it is my duty to remain vigilant and committed to the cause of improvement of the conventional medical and allied health sciences' curricula on regular basis. This will help produce technically sound professionals with advanced knowledge and skills.

Presently, UHS has designed and facilitated curriculum development committees for eleven clinical disciplines namely: DTCD, DPM, DMRT, DOMS, DLO, Dip. Card, DCH, DCP, DGO, DMRD and DA.

This document precisely briefs the details of updated curriculum for Diploma in Medical Jurisprudence (DMJ) as prepared by the Experts' Committee.

I am pleased to acknowledge the efforts made by Prof. I. A. Naveed, the Department of Medical Education and the members of the committee for DMJ consisting of: *Prof. Abdul Rasheed Mian, Dr. Riaz Sheikh, Prof.(R) Muhammad Tayyib and Dr. Muhammad Saleem (PGMI)*. The contributions made by them will go a long way in the education and training of doctors in this field.

I hope, the revised course will be able to meet the needs of latest trends in Medical Jurisprudence and will certainly produce competent mid-level specialists in the field, which is the main objective of this programme.

**Prof. M. H. Mubbashar**

Hilal-e-Imtiaz, Sitara-e-Imtiaz  
MB, FRCP, FCPS Psych, FRC Psych, DPM  
Vice Chancellor/ Chief Executive

## AIMS AND OBJECTIVES OF THE COURSE

### **AIM**

The aim of 2 years diploma programme in Medical Jurisprudence is to equip medical graduates with relevant professional knowledge, skills and ethical values to enable them to apply their acquired expertise at primary and secondary health care organizations as non-academic mid-level consultants

### **OBJECTIVES**

DMJ training should enable a student to:

1. Record all the injuries on the portion of a body in detail, including colour, shape, exact measurement, direction etc. in cases of trauma.
2. Adjudge correctly the nature of injury, kind of weapon causing them and probable duration of injury in medico-legal cases of trauma.
3. If the injuries are kept under observation then to order a set of relevant investigations which are absolutely necessary to declare the injury kept under observation at the time of examination.
4. Be aware and apply health department instructions guidelines in the medico-legal work and postmortem conduction and keep himself abreast with latest changes in the instruction from time to time.
5. Acquire requisite skill to record relevant findings in the medico-legal cases other than trauma like sexual assault, burn, examination for alcohol intake, poisoning etc. and to take and send necessary sample to the chemical examiner/ bacteriologist to Govt. of Punjab for analysis and expert opinion.
6. Counsel patients and relatives in patient's preferred language in elective and emergency situations in keeping with the principles of good communication skills, empathy and empowerment of patients.
7. Exhibit emotional maturity and stability, integrity, ethical values and professional approach, sense of responsibility in day-to-day professional activities.
8. Take proper informed consent for physical examination and ensure confidentiality and appropriate environment for physical examination in case of sexual offences.
9. Act as an independent specialist at Tehsil and District Headquarter Hospital level.
10. Show initiative and become life long self directed learner tapping on resources including clinical material, laboratory data, internet and on-line learning programmes and library.

## SPECIFIC LEARNING OUTCOMES

Following competencies will be expected from a student completing 2 years' course in DMJ. The student:

1. Should be fully competent to conduct all the medico-legal examinations and autopsies of all type of cases as per law in force at that time, standing instructions from health department and issue the final opinion.
2. Should be fully competent to understand the strand of DNA molecule, DNA finger printing and its application in Forensic Medicine.
3. Should be fully competent to recognize all the macroscopic features in the common diseases found in different organs at autopsy.
4. Should be fully competent to be employed as;
  - a) District Medico-legal officer.
  - b) Chemical examiner to Govt. of Punjab.
  - c) Any other important assignment as Forensic Science officer.
5. Should be able to identify common lapses in Medico-legal system and be able to give suggestion for its improvement keeping in view the recent advances in Forensic Medicine

## NOMENCLATURE AND DURATION

### **NOMENCLATURE OF THE PROPOSED COURSE:**

The name of diploma course should be retained as DMJ. This name has been recognized and established for the last many decades worldwide. Duration of the course should be two years structured training in a recognized department under an approved supervisor.

**Course Title:** DMJ (Diploma in Medical Jurisprudence)

**Training Centres:** Departments of Forensic Medicine (accredited by UHS) in affiliated institutes of the University of Health Sciences Lahore

### **Course Duration and Scheme of the Course:**

**Total Duration:** 2 years structured training (6 months in Part I and one & a half year in Part II) in a recognized department under the guidance of an approved supervisor

### **Part I-SIX MONTHS**

#### **Theoretical Component**

- a. Forensic Anatomy
- b. General & Forensic Pathology
- c. Forensic Serology
- d. Law relevant to medical man
- e. Behavioural Sciences
- f. Biostatistics and Research Methodology

#### **Clinical Component**

1. Microscopic examination of slides of different tests (differentiate human blood from other species or camel, hen, goat etc).
2. To differentiate between wool fiber and human hair.
3. To differentiate between human hair and animal hair under microscope.

### **Part II- YEAR & a HALF**

Specialty oriented training (both theoretical and practical aspects)

Theoretical Component:

1. General forensic medicine
2. Special forensic medicine

3. Toxicology
4. Forensic Biochemistry

**Applied / practical component**

1. Duties / practical training in postmortem conduction and reporting in autopsy lab
2. Duties in office of serologist to Govt. of Punjab
3. Duties in DNA lab and forensic science laboratory
4. Duties in the office of chemical examiner/bacteriologist to Govt. of Punjab



## ELIGIBILITY CRITERIA FOR ADMISSION

### **DOCUMENTS REQUIRED FOR THE ADMISSION**

Completed DMJ application form

1. Copy of MBBS degree with mark sheets of professional examinations and certificate of number of attempts in the professional examinations
2. Copy of PMDC registration certificate
3. Three latest passport size photographs
4. Reference letters from two consultants, with whom the applicant has worked
5. Certificates of completion of required experience

### **GENERAL REQUIREMENTS**

Candidates eligible for admission should have MBBS or equivalent qualification, registered with PMDC and fulfill one of the following criteria:

1. Two year experience as Demonstrator in the Department of Forensic Medicine & Toxicology, of a Medical College recognized by PMDC.
2. Four year experience as casualty medical officer in any Govt. DHQ/THQ hospital.

### **SPECIAL REQUIREMENTS**

1. Obtaining pass percentage in the entry test as determined by the UHS rules
2. Qualifying the interview successfully
3. Having up to the mark credentials as determined by the UHS rules (no. of attempts in each professional, any gold medals or distinctions, relevant work experience, research experience from a recognized institution, any research article published in a National or an International Journal)

### **REGISTRATION AND ENROLLMENT**

1. The total number of students enrolled for the course must not exceed 16 student including both deputationist and private candidates.
2. UHS Lahore will approve supervisors for diploma courses
3. Candidates selected for the courses will be registered with relevant supervisors and enrolled with UHS

## RECOGNITION/EQUIVALENCE OF THE DEGREE AND INSTITUTION

After two years training course candidate should be given status of mid-level specialist equivalent to any other similar qualification.

### **ACCREDITATION RELATED ISSUES OF THE INSTITUTION:**

#### **1. Faculty**

Properly qualified teaching staff in accordance with the requirements of Pakistan Medical and Dental Council (**PMDC**)

#### **2. Adequate Space**

Including class-rooms (with audiovisual aids), computer lab, pathology/serology lab, autopsy room, medico-legal clinic, museum etc.

#### **3. Library**

Departmental library should have latest editions of recommended text and reference books on Forensic Medicine & Toxicology, General Pathology, Forensic Pathology, Forensic Anthropology, Forensic Dentistry, Forensic Neuropathology, Forensic Psychiatry, Analytical Toxicology, Autopsy Procedures (Medico-legal and Hospital Autopsy), Pharmacology, Biochemistry, Forensic Radiology, Investigations at scene of crime etc and latest relevant Journal (National and International).

# CONTENT OUTLINE

## Part I DMJ

### **FORENSIC ANATOMY**

- General osteology (introduction).
- Axial skeleton (skull, mandible, vertebrate, sternum, ribs)
- Ossification.
- Human skull & cephalic indices.
- Age and sex determination from skull.
- Appendicular skeleton and ossification.
- Age and sex determination from limb bones.
- Height determination from limb bones.
- Sex differences in pelvis.
- Teeth (morphology, variations and age determination).
- Dentition (development and medico-legal aspects).
- Hair (anatomy and development)
- Hair (sex and racial variations)
- General outlines of gross human anatomy and important relations and distribution of major organs of the body.
- Oogenesis; spermatogenesis; fertilization
- Embryonic period
- Placenta; amnion; umbilical cord
- Organogenesis; basic teratology
- Foetal crown-rump + crown-heel length, weight
- Estimation of fetal age

### **GENERAL & FORENSIC PATHOLOGY**

#### **Cell Injury and adaptation**

##### Cell Injury

- Reversible and Irreversible Injury
- Fatty change, Pigmentation, Pathologic calcification
- Necrosis and Gangrene

##### Cellular adaptation

- Atrophy, Hypertrophy,
- Hyperplasia, Metaplasia, Aplasia

#### **Inflammation**

- **Acute inflammation** --- Vascular changes, Chemotaxis, Opsonization and Phagocytosis
- Cellular components and chemical mediators of acute inflammation

- Exudates and transudate
- **Chronic inflammation**
- Etiological factors, pathogenesis and classification
- Granuloma

### **Cell repair and wound healing**

- Regeneration and Repair
- Healing--- steps of wound healing by first and second intention
- Factors affecting healing
- Complications of wound healing

### **Haemodynamic disorders**

- Classification, etiology and pathogenesis of Edema, Haemorrhage, Thrombosis, Embolism, Infarction & Hyperaemia.
- Shock, classification, etiology and pathogenesis
- Compensatory mechanisms involved in shock

### **Neoplasia**

- Dysplasia and Neoplasia
- Differences between benign and malignant neoplasms
- Common etiological factors for neoplasia
- Different modes of metastasis
- TNM staging system and tumor grade

### **Immunity and Hypersensitivity**

- Humoral and cellular immunity

### **Occupational Diseases**

- Pneumoconiosis, definition, types and morphology
- Anthracosis.
- Asbestosis
- Silicosis.
- Baganosis
- Occupational cancer, agents, site, and human cancer.

## **FORENSIC SEROLOGY**

- Morphology of blood and their differences from other specimens
- Series of antigen-antibody reactions in blood; ABO blood group system and its basis.
- ABO genotypes / phenotypes, grouping & cross matching and their application in disputed paternity / maternity
- Rh blood group system
- Agglutinins / agglutinogens and their reaction (agglutination).
- Mendelian law of inheritance
- Other body fluids e.g. semen, saliva etc.
- Secretors and non-secretors

- The chemical, immunological and microscopic laboratory techniques commonly used for the examination and identification of body fluids, stains and determination of species.
- Different chemical tests for identification of hair, blood, semen
- Structure of DNA molecules
- DNA replication
- DNA recombinant techniques and its forensic applications
- Technique of sampling for DNA profiling
- Forensic DNA quality control issues.
- Current research and development for forensic DNA instrumentation and applications, statistical interpretation of results and case report writing.
- Students will process mock forensic casework.

## **LAW RELEVANT TO MEDICAL MAN**

- Basic matters relevant to the Medical Jurisprudence
- Pakistan Medical & Dental Council (constitutions, powers and responsibilities) Medical ethics
- Principles of legal system in Pakistan
- Duties and responsibilities of the doctors
- Medico-legal system in other countries
- History of legal medicine
- Medical aspect of law in relation to poisons, dangerous drugs
- Mental Health, Legal Aspect of Insanity
- Lunacy Act 1912 (Obsolete) and the latest Mental Health Ordinance 2001
- Registration of births and deaths
- Factory Act-workmen compensation
- Social Security (Industrial injuries)
- Crimes of violence-Homicide
- Suicide-Accidents-Infanticide-Sexual assaults
- Medical Negligence
- Privileged communication
- Law and Legal procedures
- Law of evidence-Responsibility of law-(criminal responsibility including testamentary capacity-contract law-writing of will)
- Consent in medical treatment
- Validity of printed consent forms
- General procedure of enquiring into the matters needing medico-legal investigation
- Hudood Ordinance 1979, Qisas and Diyat Ordinance 1990
- Injured person medical aid act 2004
- Women protection bill 2006.

## **BEHAVIOURAL SCIENCES**

- Use of non-medicinal interventions in clinical practice
- Bio-psycho-social (BPS) model of health care
- Communication skills
- Counseling
- Informational skills
  - Crisis intervention/disaster management
  - Conflict resolution
  - Breaking bad news
  - Medical ethics, professionalism and doctor-patient relationship
- Hippocratic oath
- Four pillars of medical ethics (autonomy, beneficence, non-maleficence and justice)
- Informed consent and confidentiality
- Ethical dilemmas in a doctor's life
- Psychological aspects of health and disease
- Psychological aspect of health
- Psychological aspect of disease
- Stress and its management
- Psychological aspect of pain
- Psychological aspect of aging

## **BIOSTATISTICS AND RESEARCH METHODOLOGY**

- Introduction to bio-statistics
- Introduction to bio- medical research
- Why research is important?
- What research to do?
- Selecting a field for research
- Drivers for health research
- Participation in national and international research
- Participation in pharmaceutical company research
- Where do research ideas come from
- Criteria for a good research topic
- Ethics in health research
- Writing a scientific paper
- Making a scientific presentation
- Searching the literature

## Part II DMJ

### **GENERAL FORENSIC MEDICINE**

- **Thanatology:** Definition and diagnosis of death, time since death-changes after death.
- **Trace evidence:** Recognition, collection and preservation of such material
- Identification problems (living-dead)
- Examination of human remains
- Method of re-construction.
- Examination and interpretation of injury / wounds and other medical findings in common physical assaults-various types/ relationship of trauma to disease
- Trauma and pre-existing disease-Regional trauma.
- Medico-legal autopsy-procedure-technique, facilities and accommodation in the mortuaries.
- Exhumation procedure-rules-precautions-value of exhumations

### **SPECIAL FORENSIC MEDICINE**

- Pathology of un-expected death with special emphasis on coronary heart disease and death due to vagal inhibition
- Study of possible methods of violent deaths-methods of disposal of dead bodies
- Infanticide-methods examination of infants and interpretation of findings
- Special trauma-especially explosive; Industrial; automobile- (Railway – Aircrafts etc.)
- Determination of disability
- Sexual assaults-Sexual deviations.
- Medicolegal aspect of pregnancy delivery-Abortion-Nullity- Divorce
- Psychiatry from the point of view of diagnosis and disposal
- Forensic aspect of the following specialties;
  - i) Anaesthesiology
  - ii) Radiology.
  - iii) Surgery and Orthopaedic
  - iv) Photography

### **TOXICOLOGY**

- Introduction to Toxicology
- Occupational Toxicology
- Environmental Toxicology
- Ecotoxicology
- Toxicokinetics
- Routes of Administrations of Poisons
- Action of Poisons

- Factors modifying the action of poisons
- Fate of poisons in body
- Diagnosis of poisoning in living and dead
- Medico-legal duties of doctors in case of suspected poisoning
- Antidotes: types of antidotes and their use
- Approach / Management of the poisoned patient

## **FORENSIC BIOCHEMISTRY**

- Value of "Acid-Base Balance" in the body and its clinical significance
- Biochemistry of asphyxia
- Biochemistry of rigor-mortis.
- Biochemical changes in cerebro-spinal fluid / vitreous humour in relation to time since death
- Biochemistry of autolysis.
- Biochemical changes in blood after death.
- Biochemical changes for assessment of age of wound



## METHODS OF INSTRUCTION/COURSE CONDUCTION

As a policy, active participation of students at all levels will be encouraged.

Following teaching modalities will be employed:

1. Lectures
2. Seminar Presentation and Journal Club Presentations
3. Group Discussions
4. Grand Rounds
5. Clinico-pathological conferences
6. SEQ as assignments on the content areas
7. Skill teaching in forensic labs and medico-legal sections of hospitals
8. Self study, assignments and use of internet

In addition to the conventional teaching methodologies following interactive strategies will also be introduced to improve both communication and clinical skills:

### **1.1 Monthly Student Meetings**

Each affiliated medical college approved to conduct training for DMJ will provide a room for student meetings/discussions such as:

- a. Journal Club Meeting
- b. Core Curriculum Meetings
- c. Skill Development

#### ***a. Journal Club Meeting***

Two hours per month should be allocated to the presentation and discussion of a recent journal article related to Forensic Medicine & Toxicology. The article should be critically evaluated and its applicable results should be highlighted, which can be incorporated in medico-legal practice / services. Record of all such articles should be maintained in the relevant department of each medical college. Students of different medical colleges may be given an opportunity to share all such interesting articles with each other

#### ***b. Core Curriculum Meetings***

All the core topics of DMJ should be thoroughly discussed during these sessions. The duration of each session should be at least two hours once a month. It should be chaired by the chief student (elected by the students of the relevant diploma). Each student should be given an opportunity to brainstorm all topics included in the course and to

generate new ideas regarding the improvement of the course structure.

### **a. Skill Development**

Two hours twice a month should be assigned for learning and practicing clinical skills.

Two hours twice a month should be assigned for learning and practicing medico-legal, autopsy conduction

List of skills to be learnt during these sessions is as follows:

1. Communication skills.
2. Physical Examination related to clinical examinations and medico-legal, autopsy conduction.
3. Practical Skills i.e., use of relevant autopsy instruments.
4. Presentation Skills: Power-point, lectures, small group discussions, article presentation etc.
5. Research and Scientific Writing.
6. Management of Toxicological Emergencies in Casualty department.
7. For acquisition of procedural skills (mentioned in Log book) opportunities during medicolegal and autopsy postings should be availed.

### **1.2 Annual Grand Meeting**

Once a year all students enrolled for DMJ should be invited to the annual meeting at UHS Lahore.

One full day will be allocated to this event. All the chief students will present their annual reports. Issues and concerns related to their relevant diploma courses may be discussed during the meeting.

Feedback should be collected and also suggestions can be sought in order to involve students in decision making. The research work and their literary work may also be displayed.

In the evening an informal gathering and dinner should be arranged. This will help in creating a sense of belonging and ownership among students and the faculty.

## LOG BOOK

The trainees must maintain a log book and get it signed regularly by the supervisor. A complete and duly certified log book should be part of the requirement to sit for DMJ examination. Log book should include adequate number of diagnostic and therapeutic procedures, routine and emergency management of patients, case presentation of medico-legal, trauma, poisoning and sexual assault in CPCs, journal club meetings and literature review.

Proposed Format of Log Book is as follows:

**Candidate's Name** :-----

**Roll No.** -----

### **PROCEDURES:**

1. Techniques of autopsy incisions
2. Techniques of neck dissection layer by layer
3. Opening of body cavities
4. Demonstration/examination of coronary arteries by stepwise dissection of heart and check their patency
5. Demonstration of pneumothorax, fat embolism and pulmonary embolism at autopsy table
6. Differentiate between blackening and tattooing of the fire arm case at autopsy table
7. Differentiate between bruise and postmortem clot at autopsy table
8. Techniques of using stomach wash tube in case of poisoning
9. Collection, sampling, sealing and dispatch of appropriate material in case of poisoning, rape/ zina, sodomy etc. to the chemical examiner to the Govt. of Punjab Lahore
10. Collection, sampling, sealing and dispatch of appropriate material/viscera in case of suspected disease to the Bacteriologist Govt. of Punjab Lahore

## AUTOPSY CASES HANDLED

No.	Date	Name, Age & Sex of Patient	Examination of the case, Injuries recorded, Kind of weapon, viscera sent to the chemical examiner/ Bacteriologist, If any	External scrutiny of the dead body/ clothes	Internal scrutiny/ dissection of the dead body. Any foreign body recovered.	Cause of Death	Probable time that elapsed between ; 1. Injury & death 2. Death & postmortem examination	Supervisor's signature
1								
2								

## MEDICO-LEGAL CASES HANDLED

No.	Date	Name, Age & Sex of Patient.  Admitted /not admit.  Time of arrival	Examination of the case, Injuries recorded, Kind of weapon, Investigations advised	Type of the assault	Nature of injuries. KUO/ Declared	Probable duration of injuries	Supervisor's signature
1							
2							

### Poisoning Cases Handled

No.	Date	Name, Age & Sex of Patient. Admission no.	Examination of the case, Signs and symptoms observed and recorded. Clinical condition	Samples sent to the chemical examiner/ Any other investigation prescribed	Internal scrutiny/ dissection of the dead body. Any foreign body recovered.	Treatment of the case conducted	Supervisor's signature
1							
2							

### SEMINAR/JOURNAL CLUB PRESENTATION

Sr.#	Date	Topic	Supervisor's signature
1			
2			

### EVALUATION RECORD

(Excellent, Good, Adequate, Inadequate, Poor)

Sr.#	Date	Method of Evaluation (Oral, Practical, Theory)	Rating	Supervisor's Signature
1				
2				

## LITERATURE REVIEW

Students will be assigned a clinical problem; most commonly encountered in the relevant specialty and will be specifically trained to review literature in the relevant field and write a '**Review of an Article**' comprising of:

- Topic
- Introduction
- Discussion of the reviewed literature
- Conclusion
- References

# EXAMINATIONS

## **Assessment**

It will consist of action and professional growth oriented ***student-centered integrated assessment*** with an additional component of ***informal internal assessment, formative assessment*** and measurement-based ***summative assessment***.

## **Student-Centered Integrated Assessment**

It views students as decision-makers in need of information about their own performance. Integrated Assessment is meant to give students responsibility for deciding what to evaluate, as well as how to evaluate it, encourages students to '**own**' the evaluation and to use it as a basis for self-improvement. Therefore, it tends to be growth-oriented, student-controlled, collaborative, dynamic, contextualized, informal, flexible and action-oriented.

In the proposed curriculum, it will be based on:

- Self Assessment by the student
- Peer Assessment
- Informal Internal Assessment by the Faculty

## ***Self Assessment by the Student***

Each student will be provided with a pre-designed self-assessment form to evaluate his/her level of comfort and competency in dealing with different relevant clinical situations. It will be the responsibility of the student to correctly identify his/her areas of weakness and to take appropriate measures to address those weaknesses.

## ***Peer Assessment***

The students will also be expected to evaluate their peers after the monthly small group meeting. These should be followed by a constructive feedback according to the prescribed guidelines and should be non-judgmental in nature. This will enable students to become good mentors in future.

## ***Informal Internal Assessment by the Faculty***

There will be no formal allocation of marks for the component of Internal Assessment so that students are willing to confront their weaknesses rather than hiding them from their instructors.

It will include:

- a. Punctuality
- b. Medicolegal work
- c. Monthly assessment (written tests to indicate particular areas of weaknesses)
- d. Participation in interactive sessions

### **Formative Assessment**

Will help to improve the existing instructional methods and the curriculum in use

#### ***Feedback to the faculty by the students:***

After every three months students will be providing a written feedback regarding their course components and teaching methods. This will help to identify strengths and weaknesses of the relevant course, faculty members and to ascertain areas for further improvement.

### **Summative Assessment**

It will be carried out at the end of the programme to empirically evaluate **cognitive, psychomotor** and **affective domains** in order to award diplomas for successful completion of courses.

### **Eligibility to Appear in Final Examination**

- Only those candidates will be eligible to take final examination, who have passed Part 1 examination (after 6 months of education) and have completed two years of structured/supervised training programme.
- Candidates who have completed their log books and hold certificates of 75% attendance should be allowed to sit for the exam
- The application for the final examination will be forwarded with recommendations of the supervisor
- Only those candidates who qualify in theory will be called for practical/ clinical examination



## DMJ Examination

### Part I DMJ

#### Topics included;

- |   |           |
|---|-----------|
| 1. Forensic Anatomy                           | (15 MCQs) |
| 2. Forensic & General Pathology               | (15 MCQs) |
| 3. Forensic Serology                          | (15 MCQs) |
| 4. Law relevant to medical man                | (40 MCQs) |
| 5. Behavioural Sciences                       | (10 MCQs) |
| 6. Introduction to Biostatistics and Research | (05 MCQs) |

#### Components of the Part 1 examination

MCQ Paper	100	One Best Type
Total Marks	100	Marks

### Part II DMJ

#### Topics included in paper 1

1. General forensic medicine
2. Special forensic medicine

#### Topics included in paper 2

1. Toxicology (80 % component)
2. Forensic Biochemistry (20 % component)

### Part II Examination

#### Theory

<b><u>Paper I</u></b>	<b><u>100 Marks</u></b>	<b>3 Hours</b>
10 SEQs (No Choice)	50 Marks	
50 MCQs	50 Marks	
<b><u>Paper II</u></b>	<b><u>100 Marks</u></b>	<b>3 Hours</b>
10 SEQs (No Choice)	50 Marks	
50 MCQs	50 Marks	

The candidates who pass in theory papers, will be eligible to appear in the practical / clinical & viva voce.

## **OSCE**

**90 Marks**

10 stations each carrying 9 marks of 10 minutes duration; each evaluating performance based assessment with five of them interactive

## **Clinical**

**90 Marks**

Four short cases each carrying 15 marks and one long case of 30 marks.

### **Components of the Part II examination**

Theory paper 1	100 marks
Theory paper 2	100 marks
Clinical/Oral	180 marks
Log Book	20 marks
Total Marks	400

A panel of four examiners from Forensic Medicine and Toxicology, Biochemistry and Pharmacology (One internal and two external) will be appointed for practical examination.

Each component of practical examination will be assessed by two examiners awarding marks simultaneously and independently. The final score awarded will be an average score, as agreed by both examiners.

### **Pass Percentage and Other Regulations Regarding Examination**

- Criterion referenced assessment principles will be used
- 20 marks for the log book will be included in the OSCE component
- 60% marks will be a pass score in each component
- Candidates failing in any one component will have to reappear the entire examination
- A maximum of 5 attempts to sit for the examination will be allowed, to be availed within 3 calendar years of the first attempt
- Re-admission in DMJ course is not permissible under any circumstances
- The results will be announced according to rules and regulations set by the Examination Branch of University of Health Sciences Lahore

## RECOMMENDED BOOKS

### CORE TEXTBOOK

- Anderson Pathology (Latest Edition).
- Knight's Forensic Pathology By Knight (Latest Edition).
- Forensic Pathology By Bernard Knight (Latest Edition).
- Principle And Practice Of Forensic Medicine By Nasib R Awan (Latest Edition).
- Parikh's Textbook Of Medical Jurisprudence, Forensic Medicine And Toxicology (Latest Edition).
- Gradwohl's Legal Medicine By Francis E. Camps (Latest Edition).
- Medicolegal Investigation Of Gunshot Wound By Abdullah Fateh (Latest Edition).
- Robbin's. Pathologic Basis of Diseases
- Last R. J. Anatomy (Regional and Applied)
- Snell. Clinical Anatomy.
- Langman J. Embryology
- Introduction To Statistics, Publishing Co. Inc, New York.
- Spiegel, Murray R.: Theory & Problems Of Statistics, Sehawm Publishing Co., New York.