

NOOTAN MEDICAL COLLEGE AND RESEARCH CENTRE

SANKALCHAND PATEL UNIVERSITY

Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.)

FORENSIC MEDICINE & TOXICOLOGY

CURRICULUM / SYLLABUS

GOAL, OBJECTIVES OF MBBS PROGRAMME

The broad goal of teaching undergraduate students Forensic Medicine is to produce a physician who is well informed about Medico-legal responsibility during his/her practice of Medicine. He/She will also be capable of making observations and inferring conclusions by logical deductions to set enquiries on the right track in criminal matters and associated medico-legal problems. He/She acquires knowledge of law in relation to Medical practice, Medical negligence and respect for codes of Medical ethics.

Educational objectives

(a) Knowledge

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

- i. Identify the basic Medico-legal aspects of hospital and general practice
- ii. Define the Medico-legal responsibilities of a general physician while rendering community service either in a rural primary health centre or an urban health centre
- iii. Appreciate the physician's responsibilities in criminal matters and respect for the codes of Medical ethics
- iv. Diagnose, manage and identify also legal aspect of common acute and chronic poisonings
- v. Describe the Medico-legal aspects and findings of post-mortem examination in cases of death due to common unnatural conditions and poisonings
- vi. Detect occupational and environmental poisoning, prevention and epidemiology of common poisoning and their legal aspects particularly pertaining to Workmen's Compensation Act
- vii. Describe the general principles of analytical toxicology

(b) Skills

A comprehensive list of skills and attitude recommended by Medical Council of India Regulation, 1997 desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) Graduate for Forensic Medicine and Toxicology

At the end of the course, the student shall be able to make observations and logical inferences in order to initiate enquiries in criminal matters and Medico-legal problems

- a. To be able to carry on proper Medico-legal examination and documentation/Reporting of Injury and Age

- b. To be able to conduct examination for sexual offences and intoxication
- c. To be able to preserve relevant ancillary materials for medico – legal examination
- d. To be able to identify important post-mortem findings in common unnatural deaths
- ii. Diagnose and treat common emergencies in poisoning and chronic toxicity
- iii. Make observations and interpret findings at post-mortem examination
- iv. Observe the principles of medical ethics in the practice of his profession

(c) Integration

Department shall provide an integrated approach towards allied disciplines like Pathology, Radiology, Forensic Sciences, Hospital Administration etc. to impart training regarding Medico-legal responsibilities of physicians at all levels of healthcare. Integration with relevant disciplines will provide scientific basis of clinical toxicology e.g. Medicine, Pharmacology etc.

Forensic Medicine curriculum

Topic: General Information

FM1.1 Demonstrate knowledge of basics of Forensic Medicine like definitions of Forensic medicine.

FM1.2 Describe history of Forensic Medicine

FM1.3 Describe legal procedures including Criminal Procedure Code, Indian Penal Code, Indian Evidence Act,

FM1.4 Describe Courts in India and their powers.

FM1.5 Describe Court procedures including issue of Summons, conduct money, types of witnesses, recording of evidence oath, affirmation, examination in chief, cross examination, re-examination.

FM1.6 Describe Offenses in Court including Perjury; Court strictures vis-avis Medical Officer

FM1.7 Describe Dying Declaration & Dying Deposition

FM1.8 Describe the latest decisions/notifications/resolutions/circulars/standing orders related to medico-legal practice.

FM1.9 Describe the importance of documentation in medical practice in regard to medicolegal examinations, Medical Certificates and medicolegal reports especially

- documents of issuance of wound certificate
- documents of issuance of drunkenness certificate.
- documents of issuance of sickness and fitness certificate.
- documents for issuance of death certificate. -documents of Medical Certification of Cause of Death - Form Number 4 and 4A.

FM1.10 Select appropriate cause of death in a particular scenario by referring ICD 10 code

FM1.11 Write a correct cause of death certificate as per ICD 10 document

Topic: Forensic Pathology

FM2.1 Define, describe and discuss death and its types including somatic/clinical/cellular

FM2.2 Describe and discuss natural and unnatural deaths

FM2.3 Describe and discuss issues related to sudden natural deaths

FM2.4 Describe salient features of the Organ Transplantation and The Human Organ Transplant

FM2.5 Discuss moment of death, modes of death - coma, asphyxia and syncope

FM2.6 Discuss presumption of death and survivorship

FM2.7 Describe and discuss suspended animation

FM2.8 Describe and discuss postmortem changes including signs of death,cooling of body, post-mortem lividity, rigor mortis, cadaveric spasm

FM2.9 Describe putrefaction, mummification, adipocere and maceration

FM2.10 Discuss estimation of time since death

FM2.11 Describe and discuss autopsy procedures including post-mortemexamination, different types of autopsies, aims and objectives of post-mortem examination

FM2.12 Describe the legal requirements to conduct post-mortem examination

FM2.13 Describe and discuss obscure autopsy

FM2.14 Describe and discuss examination of clothing, preservation of viscera on post-mortem examination for chemical analysis.

FM 2.15 Describe special protocols for conduction of medico-legal autopsies in cases of death in custody

FM2.16 Describe and discuss examination of mutilated bodies or fragments,charred bones and bundle of bones

FM2.17 Describe and discuss exhumation

FM2.18 Crime Scene Investigation:-Describe and discuss the objectives of crime scene visit, the duties& responsibilities of doctors on crime scene.

FM2.19 Investigation of anaesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation.

FM2.20 Mechanical asphyxia:Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxial deaths

FM2.21 Mechanical asphyxia:Describe and discuss different types of hanging and strangulation

FM2.22 Mechanical asphyxia:Describe and discuss patho-physiology, clinical features, postmortem findings and medico-legal aspects of traumatic asphyxia,obstruction of nose & mouth, suffocation and sexual asphyxia.

FM2.23 Describe and discuss types, patho-physiology, clinical features, postmortem findings and medico-legal aspects of drowning.

FM2.24 Thermal deaths.

FM2.25 Describe types of injuries, clinical features, patho-physiology, postmortem findings and medico-legal aspects in cases of burns.

FM2.26 Describe and discuss clinical features, post-mortem findings and medico-legal aspects of death due to starvation and neglect.

FM2.27 Define and discuss infanticide, foeticide and stillbirth

FM2.28 Describe and discuss signs of intrauterine death, signs of live birth,viability of foetus, age determination of foetus.

FM2.29 Demonstrate respect to the directions of courts.

FM2.30Haveknowledge/awareness of latestdecisions /notifications/ resolutions / circulars/ standing orders related to medico-legal practice.

FM2.31 Demonstrate ability to work in a team for conduction of medico-legalautopsies in cases of death following alleged negligence medical dowry death, death in custody or following violation of human rights.

FM2.32 Demonstrate ability to exchange information by verbal, or nonverbal communication to the peers, family members, law enforcing agency.

FM2.33 Demonstrate ability to use local resources whenever required like in mass disaster situations.

FM2.34 Demonstrate ability to use local resources whenever required like in mass disaster situations.

FM2.35 Demonstrate professionalism while conducting autopsy inmedicolegal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences.

Topic: Clinical Forensic Medicine

FM3.1 IDENTIFICATION Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age.

FM3.2 IDENTIFICATIONDescribe and discuss identification of criminals, unknown persons,dead bodies from the remains-hairs, fibers, teeth, anthropometry,dactylography, foot prints, scars, tattoos, poroscopy.

FM3.3 Mechanical injuries and wounds:Define, describe and classify different types of mechanical injuries,abrasion, bruise, laceration, stab wound, incised wound, chopwound, defense wound, self-inflicted/fabricated wounds.

FM3.4 Mechanical injuries and wounds: Define injury, assault & hurt. Describe IPC pertaining to injuries

FM3.5 Mechanical injuries and wounds: Describe accidental, suicidal and homicidal injuries. Describe simple, grievous and dangerous injuries.

FM3.6 Mechanical injuries and wounds: Describe healing of injury and fracture of bones with its medico-legal importance

FM3.7 Describe factors influencing infliction of injuries and healing, examination and certification of wounds

FM3.8 Mechanical injuries and wounds: Describe and discuss different types of weapons

FM3.9 Firearm injuries.

FM3.10 Firearm injuries: Describe and discuss wound ballistics-different types of firearm injuries, blast injuries and their interpretation, preservation and dispatch of trace evidences in cases of firearm and blast injuries.

FM3.11 Regional Injuries: Describe and discuss regional injuries to head (Scalp wounds, fracture skull, intracranial haemorrhages, coup and contrecoup injuries), neck, chest, abdomen, limbs, genital organs, spinal cord.

FM3.12 Regional Injuries: Describe and discuss injuries related to fall from height and vehicular injuries – Primary and Secondary impact, Secondary injuries, crush syndrome, railway spine.

FM3.13 Describe different types of sexual offences. Describe various sections of IPC regarding rape including definition of rape (Section 375 IPC), Punishment for Rape (Section 376 IPC).

FM3.14 SEXUAL OFFENCES Describe and discuss the examination of the victim of an alleged case of rape, and the preparation of report, framing the opinion and preservation and dispatch of trace evidences in such cases.

FM3.15 SEXUAL OFFENCES Describe and discuss examination of accused and victim of sodomy, preparation of report, framing of opinion, preservation and dispatch of trace evidences in such cases.

FM3.16 SEXUAL OFFENCES Describe and discuss adultery and unnatural sexual offences sodomy, incest, lesbianism, buccal coitus, bestiality, indecent assault and preparation of report, framing the opinion and preservation and dispatch of trace evidences in such cases.

FM3.17 Describe and discuss the sexual perversions fetishism, transvestism, voyeurism, sadism, necrophagia,

FM3.18 Describe anatomy of male and female genitalia, hymen and its types. Discuss the medico-legal importance of hymen.

FM3.19 Discuss the medicolegal aspects of pregnancy and delivery, signs of pregnancy, precipitate labour, superfetation, superfecundation and signs of recent and remote delivery in living and dead.

FM3.20 Discuss disputed paternity and maternity

FM3.21 Discuss Pre-conception and Pre Natal Diagnostic Techniques(PC&PNDT).

FM3.22 Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation.

FM3.23 Discuss Sterilization of male and female, artificial insemination, Test Tube Baby, surrogate mother.

FM3.24 Discuss the relative importance of surgical methods of contraception (vasectomy and tubectomy)

FM3.25 Discuss the major results of the National Family Health Survey

FM3.26 Discuss the national Guidelines for accreditation, supervision & regulation of ART Clinics in India

FM3.27 Define, classify and discuss abortion, methods of procuring MTP and criminal abortion and complication of abortion. MTP Act 1971.

FM3.28 Describe evidences of abortion - living and dead, duties of doctor in cases of abortion, investigations of death due to criminal abortion.

FM3.29 Describe and discuss child abuse and battered baby syndrome

FM3.30 Describe and discuss issues relating to torture, identification of injuries caused by torture and its sequelae, management of torture.

FM3.31 Torture and Human rights

FM3.32 Demonstrate the professionalism while preparing reports in medico-legal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological.

FM3.33 Should be able to demonstrate the professionalism while dealing with victims of torture and human right violations, sexual assault psychological consultation, rehabilitation.

Topic: Medical Jurisprudence (Medical Law and ethics)

FM4.1 Describe Medical Ethics and explain its historical emergence.

FM4.2 Describe the Code of Medical Ethics 2002 conduct, Etiquette and Ethics in medical practice and unethical practices & the dichotomy

FM4.3 Describe the functions and role of Medical Council of India and State Medical Councils

FM4.4 Describe the Indian Medical Register

FM4.5 Rights/privileges of a medical practitioner, penal erasure, infamous conduct, disciplinary Committee, disciplinary procedures

FM4.6 Describe the Laws in Relation to medical practice and the duties of a medical practitioner towards patients and society

FM4.7 Describe and discuss the ethics related to HIV patients

FM4.8 Describe the Consumer Protection Act-1986

FM4.9 Describe the medico - legal issues in relation to family violence

FM4.10 Describe communication between doctors, public and media

FM4.11 Describe and discuss euthanasia.

FM4.12 Discuss legal and ethical issues in relation to stem cell research.

FM4.13 Describe social aspects of Medico-legal cases with respect to victims of assault, rape, attempted suicide, homicide.

FM4.14 Describe & discuss the challenges in managing medico-legal cases including development of skills in relationship management –Human behaviour, communication skills.

FM4.15 Describe the principles of handling pressure – definition, types, causes, sources and skills for managing the pressure.

FM4.16 Describe and discuss Bioethics.

FM4.17 Describe and discuss ethical Principles: Respect for autonomy, nonmaleficence, beneficence & justice

FM4.18 Describe and discuss medical negligence including civil and criminal negligence, contributory negligence, corporate negligence, vicarious liability, Res Ipsa Loquitur, prevention of medical negligence

FM4.19 Define Consent. Describe different types of consent and ingredients of informed consent. Describe the rules of consent and importance of consent in relation to age, emergency situation, mental illness

FM4.20 Describe therapeutic privilege, Malingering, Therapeutic Misadventure, Professional Secrecy, Human Experimentation.

FM4.21 Describe Products liability and Medical Indemnity Insurance

FM4.22 Explain Oath – Hippocrates, Charaka and Sushruta and procedure for administration of Oath.

FM4.23 Describe the modified Declaration of Geneva and its relevance

FM4.24 Enumerate rights, privileges and duties of a Registered Medical Practitioner. Discuss doctor- patient relationship.

FM4.25 Clinical research & Ethics Discuss human experimentation including clinical trials

FM4.26 Discuss the constitution and functions of ethical committees

FM4.27 Describe and discuss Ethical Guidelines for Biomedical Research on Human Subjects & Animals

FM4.28 Demonstrate respect to laws relating to medical practice and Ethical code of conduct prescribed by Medica

FM4.29 Demonstrate ability to communicate appropriately with media, public

FM4.30 Demonstrate ability to conduct research in pursuance to guidelines.

Topic: Forensic Psychiatry

FM5.1 Classify common mental illnesses including post-traumatic stress disorder (PTSD)

FM5.2 Define, classify and describe delusions, hallucinations, illusion, lucid interval and obsessions with exemplification

FM5.3 Describe Civil and criminal responsibilities of a mentally ill person

FM5.4 Differentiate between true insanity from feigned insanity

FM5.5 Describe & discuss Delirium tremens

FM5.6 Describe the Indian Mental Health Act, 1987 with special reference to admission, care and discharge of a mentally ill person

Topic: Forensic Laboratory investigation in medical legal practice

FM6.1 Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids

FM6.2 Describe the methods of sample collection, preservation, labelling, dispatch, and interpretation of reports

FM6.3 Demonstrate professionalism while sending the biological or trace evidences to Forensic Science laboratory.

Topic: Emerging technologies in Forensic Medicine

FM7.1 Enumerate the indications and describe the principles and appropriate use for:

- DNA profiling -Facial reconstruction
- Polygraph (Lie Detector)
- Narcoanalysis,
- Brain Mapping,
- Digital autopsy,
- Virtual Autopsy,
- Imaging technologies

Topic: Toxicology: General Toxicology

FM8.1 Describe the history of Toxicology

FM8.2 Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison

FM8.3 Describe the various types of poisons, Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead

FM8.4 Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons

FM8.5 Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis

FM8.6 Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India

FM8.7 Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids

FM8.8 Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination

FM8.9 Describe the procedure of intimation of suspicious cases or actual cases of foul play to the police, maintenance of records, preservation and despatch of relevant samples

FM8.10 Describe the general principles of Analytical Toxicology and give a brief description of analytical methods available for toxicological analysis: Chromatography – Thin Layer Chromatography

Topic: Toxicology : Chemical Toxicology

FM 9.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Caustics Inorganic – sulphuric, nitric, and hydrochloric acids; Organic- Carbolic Acid (phenol), Oxalic and acetylsalicylic acids

FM9.2 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Phosphorus Iodine, Barium

FM9.3 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Arsenic, lead, mercury, copper, iron, cadmium and thallium

FM9.4 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ethanol, methanol, ethylene glycol

FM9.5 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination

with regard to Organophosphates, Carbamates, Organochlorines, Pyrethroids, Paraquat, Aluminium and Zinc phosphide.

FM9.6 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ammonia, carbon monoxide, hydrogen cyanide & derivatives, methyl isocyanate, tear (riot control) gases

Topic: Toxicology : Pharmaceutical Toxicology

FM 10.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to:

- i. Antipyretics – Paracetamol, Salicylates
- ii. Anti-Infectives (Common antibiotics – an overview)
- iii. Neuropsychotoxicology Barbiturates, benzodiazepines, phenytoin, lithium, haloperidol, neuroleptics, tricyclics
- iv. Narcotic Analgesics, Anaesthetics, and Muscle Relaxants
- v. Cardiovascular Toxicology Cardiotoxic plants

Topic: Toxicology : Biotoxicology

FM11.1 Describe features and management of Snake bite, scorpion sting, bee and wasp sting and spider bite

Topic: Toxicology : Sociomedical Toxicology

FM12.1 Describe features and management of abuse/poisoning with following chemicals Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent

Topic: Toxicology : Environmental Toxicology

FM13.1 Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry

FM13.2 Describe medico-legal aspects of poisoning in Workman's Compensation Act

Topic: Skills in Forensic Medicine & Toxicology

FM14.1 Examine and prepare Medico-legal report of an injured person with different etiologies in a simulated/ supervised environment

FM14.2 Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment

FM14.3 Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case

FM14.4 Conduct and prepare report of estimation of age of a person for medico-legal and other purposes

FM14.5 Conduct & prepare post-mortem examination report of varied etiologies (at least 15) in a simulated/ supervised environment

FM14.6 Demonstrate and interpret medico-legal aspects from examination of hair (human & animal) fibre, semen & other biological fluids

FM14.7 Demonstrate & identify that a particular stain is blood and identify the species of its origin

FM14.8 Demonstrate the correct technique to perform and identify ABO & RH blood group of a person

FM14.9 Demonstrate examination of & present an opinion after examination of skeletal remains in a simulated/ supervised environment

FM14.10 Demonstrate ability to identify & prepare medicolegal inference from specimens obtained from various types of injuries

FM14.11 To identify & describe weapons of medicolegal importance which are commonly used e.g. lathi, knife, kripa, axe, gada, gupta, farsha, dagger, bhalla, razor & stick

FM14.12 Describe the contents and structure of bullet and cartridges used & to provide medico-legal interpretation from these

FM14.13 To estimate the age of foetus by post-mortem examination

FM14.14 To examine & prepare report of an alleged accused in rape/unnatural sexual offence in a simulated/ supervised environment

FM14.15 To examine & prepare medico-legal report of a victim of sexual offence/unnatural sexual offence in a simulated/ supervised environment

FM14.16 To examine & prepare medico-legal report of drunk person in a simulated/ supervised environment

FM14.17 To identify & draw medico-legal inference from common poisons e.g. dhatura, castor, cannabis, opium, aconite copper sulphate, pesticides compounds, marking nut, oleander, Nux vomica, abrus seeds, Snakes, capsicum, calotropis, lead compounds & tobacco

FM14.18 To examine & prepare medico-legal report of a person in police, judicial custody or referred by Court of Law and violation of human rights as requirement of NHRC

FM14.19 To identify & prepare medico-legal inference from histo-pathological slides of Myocardial Infarction, pneumonitis, tuberculosis, brain infarct, liver cirrhosis, brain haemorrhage, bone fracture, Pulmonary oedema, brain oedema, soot particles, diatoms & wound healing

FM14.20 To record and certify dying declaration in a simulated/ supervised environment

FM14.21 To collect, preserve, seal and dispatch exhibits for DNA-Finger printing using various formats of different laboratories.

FM14.22 To give expert medical/ medico-legal evidence in Court of law.

Integration

Human Anatomy

AN14.3 Describe the importance of ossification of lower end of femur & upper end of tibia

Pharmacology

PH1.22 Describe drugs of abuse (dependence, addiction, stimulants, depressants, psychedelics, drugs used for criminal offences)

PH5.7 Demonstrate an understanding of the legal and ethical aspects of prescribing drugs

Radiodiagnosis

RD1.13 Describe the components of the PC & PNDT act and its medicolegal implications

Psychiatry

PS19.3 Describe and discuss the basic legal and ethical issues in psychiatry

General Medicine

IM20.1 Enumerate the poisonous snakes of your area and describe the distinguishing marks of each

IM20.2 Describe, demonstrate in a volunteer or a mannequin and educate (to other health care workers / patients) the correct initial management of patient with a snake bite in the field

IM20.3 Describe the initial approach to the stabilisation of the patient who presents with snake bite

IM20.4 Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite

IM21.2 Enumerate the common plant poisons seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification

IM21.3 Enumerate the common corrosives used in your area and describe their toxicology, clinical features, prognosis and approach to therapy

IM21.4 Enumerate the commonly observed drug overdose in your area and describe their toxicology, clinical features, prognosis and approach to therapy

IM21.5 Observe and describe the functions and role of a poison center in suspected poisoning

IM21.6 Describe the medico legal aspects of suspected suicidal or homicidal poisoning and demonstrate the correct procedure to write a medico legal report on a suspected poisoning

IM21.7 Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy

IM21.8 Enumerate the indications for psychiatric consultation and describe the precautions to be taken in a patient with suspected suicidal ideation / gesture

Obstetrics & Gynaecology

OG1.3 Define and Discuss still birth and abortion

OG9.2 Describe the steps and observe/ assist in the performance of an MTP evacuation

OG20.1 Enumerate the indications and describe and discuss the legal aspects, indications, methods for first and second trimester MTP; complications and management of complications of medical termination of pregnancy

OG20.2 In a simulated environment administer informed consent to a person wishing to undergo medical termination of pregnancy

OG20.3 Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC& PNDT) Act 1994 & its amendments

General Surgery

SU8.1 Describe the principles of Ethics as it pertains to surgery

SU8.2 Demonstrate Professionalism and empathy to the patient undergoing surgery

SU8.3 Discuss Medico legal issues in surgical practice

FORENSIC MEDICINE TEACHING HOURS:

<u>SUBJECT</u>	<u>LECTURE (HOURS)</u>	<u>PRACTICALS (SMALL GROUP LEARNING, TUTOTIALS / SEMINARS / INTEGRATED LEARNING (HOURS)</u>	<u>SELF- DIRECTED LEARNING (HOURS)</u>	<u>TOTAL (HOURS)</u>
Forensic Medicine & Toxicology	15	30	5	50
	25	45	5	75

NOTE:

Total four Internal Examination will be taken at the end of each term. The fourth internal examination will be pre university examination, which will be similar and identical with the main university examination. The students will be evaluated by theory paper and practical including viva, medico legal report writing and spotting.

FIRST INTERNAL

2nd Year MBBS :

PHASE	I-Exam (At the end of 1 st Term)		
	Theory	Practical	Total Marks
SECOND PROFESSIONAL	50	50	100

SECOND INTERNAL

2nd Year MBBS :

PHASE	II-Exam (At the end of 2 nd Term)		
	Theory	Practical	Total Marks
SECOND PROFESSIONAL	50	50	100

THIRD INTERNAL

3rd Year MBBS Part I :

PHASE	II-Exam (At the end of 1 ST Term)		
	Theory	Practical	Total Marks
THIRD PROFESSIONAL (PART I)	50	50	100

FOURTH INTERNAL (PUC)

3rd Year MBBS Part I :

PHASE	II-Exam (At the end of 2 nd Term)		
	Theory	Practical	Total Marks
THIRD PROFESSIONAL (PART I)	50	50	100

UNIVERSITY EXAMINATION

THIRD PROFESSIONAL (PART I)

3rd Year MBBS Part I :

Name of the subject	Theory Maximum	Theory Passing	Practical Maximum	Practical Passing
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	marks	marks	marks	marks
FORENSIC MEDICINE	100	50	100	50

1. There will be total 4 internal assessment examinations. At the end of each term, there will be 1 internal examination. The 4th internal examination will be Pre university examination. The pattern of the Pre university examination theory as well as practical will be similar to University examination.
2. The approximate time of all internal examinations is mentioned as above and is subject to change.
3. It is mandatory for the students to appear for all the internal examinations. This examination will be conducted before submission of internal assessment marks to the University.
4. Student should obtain 50% combined in theory and practical (not less than 40% in each) in all internal examinations for eligibility to appear in University Examinations. Final internal assessment marks will be rounded off.
5. Students who are not eligible for University can give remedial examination organized by the college after preliminary examination and before University Examination to become eligible.
6. If student is not eligible even after remedial measures, he/she has to appear for all internal assessment examinations and Pre university examination along with next regular batch of students & marks obtained in this examination will be used to calculate internal assessment marks. Further rules for these students will remain similar to the students admitted in next regular batch.
7. Supplementary University examinations for failure students of University examinations will be conducted as per University & MCI rules.
8. Results of internal marks will be displayed on notice board.
9. Internal marks are only to decide the eligibility of the student to appear in the university examination and will be shown under separate head in the University mark sheet and will not affect the University examination result.

Third (Part 1) MBBS, Forensic Medicine Internal marks scheme :

Examination	Forensic Medicine and Toxicology	
	Theory	Practical
First Internal Exam	5	5
Second Internal Exam	5	5
Third Internal Exam	5	5
Pre University Exam	10	10
Total	25	25

UNIVERSITY EXAMINATION

Rules and Pattern of University examination

Eligibility to appear for final professional examination

- Attendance - 75% in theory and 80% in practical /clinical
- Minimum 40% marks in theory internal assessment
- Minimum 40% marks in practical/clinical internal assessment

Passing criteria - Minimum 50% marks in theory and 50% marks in practical separately

Results of internal marks to be displayed on notice board.

Final internal assessment marks will be rounded off.

Internal marks will be shown under separate head at university mark sheet /grade card and are **NOT** to be added to final university exams marks

University Theory Examination Instructions:

One Paper (I), 100 marks, Two sections in paper. 50 marks each

Time duration: 3 (three) hours.

Division of Topics for Paper I

Section – I

- ❖ Forensic Medicine. (50 marks)

Section –II

- ❖ Toxicology, Forensic psychiatry, Ethics (50 mark)

University Practical Exam Instructions:

- Total 4 examiners (2 pairs); Marks should be given by a pair of examiners and not by single examiner.
- Sealed original and duplicate mark sheet should be submitted at the end of each session
- Sealed original cover will be sent to the University and the duplicate sealed cover will remain with Dean.
- Division of marks in pairs of examiners

TOPIC	Marks
Spots(15 * 2 marks)	30 marks
Medicolegal Exercise (PM writing)	10 Marks
Medicolegal Exercise (Injury, Rape, Age, alcohol examination)	10 Marks
Pair I Oral viva (Forensic Medicine)	25 Marks
Pair II Oral viva (Toxicology, Forensic psychiatry, Medical Ethics)	25 Marks
Total	100 Marks