

FORENSIC MEDICINE

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1. Impart Knowledge about Medical, Legal and Medicolegal responsibilities of a physician.
2. Create awareness of laws in relation to Medical Practice.
3. Impart knowledge of Medical Ethics and Etiquette to be followed during Medical Practice.
4. Create ability to develop observation skills in Medicolegal cases.
5. Develop logical thinking to set enquiries on possible track on Medicolegal issues.

SPECIFIC LEARNING OBJECTIVES :

(A) KNOWLEDGE

At the end of the course the student shall be :

1. Able to identify and deal with all Medicolegal cases
2. Able to know the procedure of examination of a Medicolegal case and be aware about the procedure of collection of the requisite evidential materials.
3. Aware about the prevalent law and legal procedures and be able to appear in a court of law as a Registered Medical Practitioner and give evidence in cases of Homicide, Assault, Sexual offences, Alcoholic intoxication, Drug dependence and other cases requiring medical opinion
4. Aware about the procedure of preparation of Medicolegal reports.
5. Practice medicine in the society following medical ethics and etiquette as prescribed by the Indian Medical Council.

(B) SKILL

At the end of the course a student must be :

1. Able to conduct a proper Medicolegal examination, document and report in all Medicolegal cases.
2. Able to conduct the Medicolegal Autopsy
3. Able to examine, document and preserve evidence in sexual offence cases
4. Able to diagnose and treat cases of poisoning.
5. Able to examine, document and report in cases of drunkenness
6. Able to collect, preserve and dispatch specimens and relevant materials to the concerned centers in Medicolegal cases.
7. Prepare Medical record and reports
8. Able to properly depose evidence in a court of law.
9. Competent to issue all Medical and Medicolegal certificates.

Age Estimation	Radiology and Dentistry	Vertical Integration
Clinical Forensic Medicine	OBG, Orthopaedics, Radiology, EMD	Vertical Integration
Toxicology	Bio-chemistry, Pharmacology, Internal Medicine, EMD	Vertical Integration & Horizontal Integration
Thanatology	Pathology, Microbiology	Horizontal Integration

TEACHING HOURS – THEORY

Introduction History of Forensic Medicine, Ethics, Medical Jurisprudence, legal Proceedure	08 hours
Identification	07 hours
Thanatology, PM changes, Medicolegal Autopsy, Exhumation	09 hours
Injuries - Mechanical, Thermal, Physical Agents, Radiation, Firearms, RTA and Regional Injuries	12 hours
Asphyxial deaths	06 hours
Anasthetic and Operative deaths	01 hours
Sexual Jurisprudence - Impotence, Sterility, AI, Virginity, Pregnancy, Delivery, Abortion, MTP act, ART, Sexual offences	10 hours
Infanticide, Child Abuse	02 hours
Toxicology	12 hours
Psychiatry	05 hours
FSL, Trace Evidence, Artifacts, Blood Stains & body fluids	03 hours
TOTAL	75 Hours



Thanatology	04 hours
Injuries	04 hours
Asphyxial Deaths	02 hours
Infanticide	01 hours
Sexual Jurisprudenace	04 hours
Toxicology	06 hours
TOTAL	25 hours

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Thanatology	1,2,3,4
Injuries	1,2,3,4
Asphyxial deaths	1,2
Anaesthetic and Operative Deaths	1
Sexual Jurisprudence	1,2,3
Infanticide	1,2
Toxicology	1,2,3,4
Psychiatry	1,2,3
FSL, Blood stains, Biological fluids	1,4

1 : DIDATIC LECTURES

2 : STUDENT SEMINARS

3 : SMALL GROUP TEACHING

4 : HANDS ON TRAINING

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Legal Procedure : Inquests, Subpoena, Conduct money, Procedure of Criminal trial, Record of evidence, Types of evidence, Medical evidence, Types of witness.

2. MEDICAL ETHICS AND LAW

Laws governing medical profession :

Indian Medical Council and State Medical Council organisations, functions, and powers

Rights and privileges of Registered Medical Practitioner. Infamous Conduct. Professional Negligence (malpractice)

3. DUTIES OF MEDICAL PRACTITIONER

Doctrine of Res ipsa Loquitur, Contributory Negligence, Vicarious responsibility, Consent, Euthanasia.

4. IDENTIFICATION

Definition and data to establish identity.

Race, Religion, Sex, Age, Stature, complexion and features, external peculiarities, anthropometry, dactylography, and poroscopy, Superimposition Technique

Forensic odontology. Medico-legal importance of Age and Sex.

5. THANATOLOGY (DEATH)

Types of death. Modes of death and their patho-physiology, Causes of death, Classification and medico-legal aspects of natural death

6. POST MORTEM CHANGES

Signs of death. Changes following death and their medico-legal importance

Adipocere, Mummification, Embalming

Estimation of Post mortem Interval (time of death)

Presumption of death and survivorship.

8. MECHANICAL INJURIES (WOUNDS).

Classification and mechanism of wound production

Abrasions, Contusions, Incised wounds, Chop wounds, Stab wounds and Lacerated wounds and their medico-legal Importance,

Firearms classification and cartridges.

Firearm wounds by different firearms and their medico-legal importance

Bomb Explosion Wounds.

Regional injuries on the body and Medico-legal importance.

Medico- legal aspects of wounds – Issue of medico – legal certificates for legal purposes.

Homicide & types of homicide.

Simple and Grievous injuries – causes of death from wounds

9. DEATH DUE TO COLD, HEAT, ELECTRICITY AND RADIATION**10. VIOLENT ASPHYXIAL DEATHS**

Classification - Hanging, Strangulation by ligature Throttling, Smothering, Gagging, Overlaying, Burking, Choking, Drowning and Sexual asphyxia

11. ANAESTHETIC AND OPERATIVE DEATHS.**12. IMPOTENCE AND STERILITY**

Definition, causes, and medico-legal importance.

Sterilization and Artificial insemination and their medico-legal importance.

13. VIRGINITY, PREGNANCY AND DELIVERY

Definition, diagnosis and medico-legal importance,

Pseudocyesis, Super fecundation, Superfoetation,

Legitimacy, Paternity and their medico-legal importance.

Definition, still birth, dead birth and live birth

Signs of live birth and autopsy in suspected case of infanticide

Causes of death and medico-legal importance.

Abandoning of infants, Concealment of birth, Battered baby syndrome, Cot death.

16. SEXUAL OFFENCES

Classification

Rape – definition, examination of victim and the accused – Incest,

Unnatural sexual offences, types and their medico-legal importance.

Sexual Perversion – types and their medico-legal importance – Indecent assault.

Examination of seminal fluid.

17. TOXICOLOGY

General consideration - Law on poisons, classification of poisons.

Diagnosis of poisoning in the living and dead.

Duties of the Registered medical practitioner in suspected case of poisoning.

General principles of treatment of poisoning

Corrosive poisons, Non-metallic poisons, Insecticides and weed killers, Metallic poison, Organic irritant poison, someferous poisons, Inebriants, Deliriant, spinal poisons, food poisoning, cardiac poisons, Asphyxiants, war gases Curare, Conium. Drug dependence and Addiction.

18. FORENSIC PSYCHIATRY

Delusion, Hallucination, Illusion, Impulse, Obsession, Delirium, Lucid interval Classification of unsoundness of mind and medico – legal aspects.

Restraint of Insane.

19. EXAMINATION OF BLOOD STAINS AND HAIR AND SUSPECTED BIOLOGICAL AND FIBRES STAINS.

20. ORGANISATION OF FORENSIC SCIENCE LABORATORY

Locard's principle; Lie detection, Narcoanalysis, Hypnosis.



4. Identification – Radiological, Physical and dental examination

5. Examination of a medical witness in the court

6. Conduct and duties of doctor in the witness box

7. Examination of Photographs and opinion

8. Examination of victims in sexual offence cases

9. Examination of accused in sexual offence cases

10. Foetal examination

11. Infanticide,

12. Preparation and issual of death certificates

13. Examination of specimen of Pathological and Forensic Significance

14. Examination of Weapons

15. Examination of Toxicology specimens, Plants and Seeds

16. Viscera packing

17. Examination of blood stains, hair, seminal stains etc.,

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Text book of Medical Jurisprudence and Toxicology -

Dr. C.K. Parik

Modi's medical Jurisprudence and Toxicology

- Dr. C.A. Franklin

Medico Legal Post Mortem in India Published

- Dr. C.K. Parik

Forensic Medicine

- Dr. Keith Simpson

Text Book of Forensic Medicine

- Dr. V.V. Pillay

Lyons Medical Jurisprudence and Toxicology

- Dr. Dogra

Text Book of Forensic Medicine Toxicology

- Dr. R.N. Karmarkar

Principles of Forensic Medicine and Toxicology

- Dr. Rajesh Bardale

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The above pattern is to be implemented from 2018 February Exam session onwards

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2. Examination of a case of Drunkenness
or
Examination of Injured person and issual of Wound Certificates = 05 marks
3. Examination of a of Victim / Assailant in case of sexual offence = 03 marks
4. Examination of Foetus = 03 marks
5. Issual of Medical Certificate
(Birth/Death/Physical Fitness / Medical Leave) = 03 marks
6. Interpretation of Autopsy Findings and opining on cause of deaths and time since death = 03 marks
7. SPOTTERS (5 NOS) = 05 marks
 - a. Forensic Specimen
 - b. Toxicology : Plant
 - c. Toxicology : Seed
 - d. Weapon
 - e. Photograph
8. OSPE – 3 Stations = 03 marks
 - a. Viscera Packing
 - b. DNA Sampling
 - c. Correlation of weapon/object with injury

30 Marks

STATION	MARKS	TOPICS
EXAMINER 1	2.5	<ul style="list-style-type: none"> • MEDICAL JURISPRUDENCE • MEDICAL ETHICS & LAW • IDENTIFICATION • THANATOLOGY • PM CHANGES, MEDICOLEGAL AUTOPSY
EXAMINER 2	2.5	<ul style="list-style-type: none"> • MECHANICAL INJURIES • THERMAL INJURIES • DEATHS DUE TO ELECTRICITY, RADIATION • ASPHYXIAL DEATHS • ANAESTHETIC & OPERATIVE DEATHS
EXAMINER 3	2.5	<ul style="list-style-type: none"> • IMPOTENCE, STERILITY • VIRGINITY, PREGNANCY, DELIVERY • ABORTION, MTP ACT, INFANTICIDE • SEXUAL OFFENCES • FORENSIC PSYCHIATRY
EXAMINER 4	2.5	<ul style="list-style-type: none"> • TOXICOLOGY • FSL • EXAMINATION OF BLOOD, BIOLOGICAL STAINS, HAIR, FIBRE

INTERNAL ASSESMENTS PATTERN



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IAE 1	JANUARY	<ul style="list-style-type: none"> MEDICAL JURISPRUDENCE MEDICAL ETHICS & LAW IDENTIFICATION THANATOLOGY, PM CHANGES 	FEBRUARY
IAE 2	APRIL	<ul style="list-style-type: none"> MEDICOLEGAL AUTOPSY MECHANICAL INJURIES THERMAL INJURIES DEATHS DUE TO ELECTRICITY, RADIATION 	MAY
IAE 3	JULY	<ul style="list-style-type: none"> ASPHYXIAL DEATHS ANAESTHETIC & OPERATIVE DEATHS IMPOTENCE, STERILITY VIRGINITY, PREGNANCY, DELIVERY ABORTION, MTP ACT, INFANTICIDE 	AUGUST
IAE 4	OCTOBER	<ul style="list-style-type: none"> SEXUAL OFFENCES FORENSIC PSYCHIATRY TOXICOLOGY 	NOVEMBER
IAE 5 / MODEL EXAM	DECEMBER	ALL TOPICS	JANUARY

INTERNAL ASSESSMENT :**20 MARKS****{THEORY 10 + PRACTICAL 5 + RECORD 5}**

CRRI ORIENTATION

EVERY CRRI WILL PARTICIPATE IN A ONE DAY ORIENTATION PROGRAM / WORKSHOP ORGANISED BY THE DEPARTMENT OF FORENSIC MEDICINE WHERE HE WILL BE TAUGHT ABOUT

- ETHICS & ETIQUETTE IN CLINICAL PRACTICE
- CONFIDENTIALITY IN CLINICAL PRACTICE
- LEGAL ASPECTS OF MEDICAL PRACTICE

FURTHER EVERY CRRI POSTED IN THE CASUALTY UNDER THE DEPARTMENT OF FORENSIC MEDICINE WILL UNDERGO TRAINING ABOUT

- IDENTIFICATION OF MEDICOLEGAL CASE
- APPROACH TOWARDS A MEDICOLEGAL CASE IN A HOSPITAL SET UP / DURING CLINICAL PRACTICE
- PREPARING & SUBMITTING RELEVANT DOCUMENTS / REPORTS RELATED



- COLLECTION & PRESERVATION OF EVIDENTIAL MATERIALS
- CERTIFICATION/ DECLARATION OF DEATH
- CONDUCTION OF MEDICOLEGAL AUTOPSY

RECORD:

Record should be followed as recommended by the University

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	INTRODUCTION TO LEGAL TERMINOLOGIES	*		
	INQUEST	*		
	COURTS OF LAW & THEIR POWERS	*		
	NHRC & OTHER AGENCIES		*	
	COURT PROCEEDINGS	*		
	SUBPOENA OR SUMMONS	*		
	CONDUCT MONEY	*		
	WITNESSES	*		
	RECORDING OF EVIDENCE	*		
	DYING DECLARATION	*		
	CONDUCT AND DUTIES OF THE DOCTOR IN THE WITNESS BOX	*		
	INVESTIGATION OF THE SCENE OF DEATH			*
	PROCEDURE OF CRIMINAL TRIAL		*	
	WORKMANS COMPENSATION ACT, ESI ACT, ORS		*	
3	MEDICAL LAW AND ETHICS			
	THE INDIAN MEDICAL COUNCIL ACT 1956 ; FUNCTIONS & POWERS OF MEDICAL COUNCILS	*		

	PRIVILEGED COMMUNICATION	*		
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	PRIVILEGES AND RIGHTS OF THE PATIENTS	*		
	INFAMOUS CONDUCT	*		
	PROFESSIONAL NEGLIGENCE (MALPRAXIS)	*		
	THE DOCTRINE OF RES IPSA LOQUITTUR	*		
	NOVUS ACTUS INTERVENIENS	*		
	MEDICAL NEGLIGENCE PREVENTION	*		
	SUPREME COURT OF INDIA GUIDELINES ON MEDICAL NEGLIGENCE		*	
	THERAPEUTIC MISADVENTURE	*		
	VICARIOUS LIABILITY	*		
	PRODUCTS LIABILITY	*		
	MEDICAL INDEMNITY INSURANCE		*	
	MEDICAL RECORDS (M.R)	*		
	CONSENT IN MEDICAL PRACTICE	*		
	EUTHANASIA (MERCY KILLING)		*	
	RED CROSS EMBLEM			*
	CONSUMER PROTECTION ACT	*		

	SKELETAL REMAINS EXAMINATION	*		
	ESTIMATION OF AGE BY PHYSICAL, DENTAL & RADIOLOGICAL EXAMINATION	*		
	MEDICOLEGAL IMPORTANCE OF AGE	*		
	ANTHROPOMETRY	*		
	DACTYLOGRAPHY	*		
	SKULL PHOTO SUPERIMPOSITION		*	
	FORENSIC ODONTOLOGY		*	
	BITE MARKS			*
5	THANATOLOGY			
	TYPES, MODE, MOMENT, MANNER & CAUSE OF DEATH	*		
	MEDICAL CERTIFICATE OF CAUSE OF DEATH	*		
	BRAIN DEATH	*		
	TISSUE AND ORGAN TRANSPLANTATION		*	
	SUDDEN DEATH	*		
	POSTMORTEM CHANGES	*		
6	MEDICOLEGAL AUTOPSY			
	ETHICS OF MEDICOLEGAL AUTOPSY & RESPECT TOWARDS CADAVER	*		

	VIRTUAL AUTOPSY (VIRTOPSY)	www.FirstRanker.com	www.FirstRanker.com	*
	ENDOSCOPIC TECHNIQUE OF POSTMORTEM DIAGNOSIS			*
	AUTOPSY OF CASES OF AIDS AND OTHER INFECTIONS		*	
	THE AUTOPSY AND DISPOSAL OF RADIOACTIVE CORPSE			*
	NHRC RECOMMENDATION ON AUTOPSY	*		
	PRESERVATION & DESPATCH OF VISCERA IN CASES OF SUSPECTED POISONING	*		
	LABORATORY PROCEDURES			*
	AUTOPSY OF DECOMPOSED BODIES	*		
	EXAMINATION OF MUTILATED BODIES OR FRAGMENTS		*	
	EXHUMATION	*		
	SECOND AUTOPSY		*	
	NEGATIVE AUTOPSY, OBSCURE AUTOPSY	*		
	EMBALMING		*	
	ESTIMATION OF POSTMORTEM INTERVAL	*		
	RADIOACTIVE CARBON			*
	PRESUMPTION OF DEATH		*	
	PRESUMPTION OF SURVIVORSHIP		*	

	MECHANISM OF WOUND PRODUCTION	*		
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	ABRASIONS, CONTUSIONS, INCISED WOUNDS, CHOP WOUNDS, STAB WOUNDS AND LACERATED WOUNDS AND THEIR MEDICO-LEGAL IMPORTANCE	*		
	INJURIES CAUSED BY FIRE ARMS	*		
	FORENSIC BALLISTICS, BOMB EXPLOSION		*	
	THERMAL INJURIES	*		
	INJURIES CAUSED BY PHYSICAL AGENTS	*		
	WOUND CERTIFICATION	*		
8	REGIONAL & TRANSPORTATION INJURIES	*		
9	MEDICOLEGAL ASPECTS OF WOUNDS			
	SIMPLE & GRIEVOUS HURT	*		
	CAUSES OF DEATH FROM WOUNDS	*		
	DOWRY DEATHS		*	
	TORTURE			*
	DEATH IN CUSTODY			*
10	STARVATION			*
11	MECHANICAL ASPHYXIA			

	JUDICIAL HANGING			*
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	DISSECTION OF NECK & HYOID BONE FRACTURES	*		
	DROWNING	*		
	DIATOMS		*	
	SEXUAL ASPHYXIAS			*
12	ANAESTHETIC AND OPERATIVE DEATHS		*	
13	IMPOTENCE AND STERILITY			
	DEFINITION, CAUSES & MEDICOLEGAL IMPORTANCE	*		
	STERILISATION	*		
	ARTIFICIAL INSEMINATION		*	
	ASSISTED REPRODUCTIVE TECHNIQUE (ART)		*	
	SURROGATE MOTHERHOOD		*	
	CLONING			*
14	VIRGINITY, PREGNANCY AND DELIVERY			
	DEFINITION & MEDICOLEGAL IMPORTANCE	*		
	DIAGNOSIS OF PREGNANCY	*		
	SIGNS OF DELIVERY IN LIVING & DEAD	*		

15 ABORTION

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	DEFINITION, CLASSIFICATION	*		
	METHODS OF PROCURING ABORTION	*		
	DIAGNOSIS & EVIDENCES OF ABORTION IN LIVING & DEAD	*		
	THE MEDICAL TERMINATION OF PREGNANCY ACT 1971	*		
16	INFANT DEATHS			
	DEFINITION & SIGNS OF LIVE BIRTH	*		
	VIABILITY	*		
	STILL BIRTH, DEAD BORN	*		
	BATTERED BABY SYNDROME OR NON ACCIDENTAL INJURY OF CHILDHOOD	*		
	MUNCHAUSEN'S SYNDROME		*	
	SUDDEN INFANT DEATH SYNDROME	*		
	CONCEALMENT OF BIRTH	*		
	ABANDONMENT			*
	FETAL AUTOPSY		*	
17	SEXUAL OFFENCES			
	CLASSIFICATION	*		

	OF SEXUAL ASSAULT			
	EXAMINATION OF ACCUSED FOR POTENCY	*		
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	TYPES & MEDICOLEGAL ASPECTS OF UNNATURAL SEXUAL OFFENCES		*	
	TYPES & MEDICOLEGAL ASPECTS OF SEXUAL PERVERSIONS		*	
	CERTIFICATION IN CASES OF SEXUAL OFFENCES	*		
	INDECENT ASSAULT		*	
18	EXAMINATION OF BLOOD STAINS & BIOLOGICAL MATERIAL			
	SUBSTANCES RESEMBLING BLOOD STAINS	*		
	BLOOD GROUPS IN TISSUES	*		
	CHEMICAL EXAMINATION		*	
	MICROSCOPIC EXAMINATION		*	
	MICROCHEMICAL EXAMINATION		*	
	SPECTROSCOPIC EXAMINATION		*	
	SEROLOGICAL EXAMINATION		*	
	DNA FINGERPRINTING		*	
	BIOLOGICAL SAMPLES ENCOUNTERED IN FORENSIC PRACTICE : COLLECTION, PRESERVATION & EXAMINATION		*	
	EXAMINATION OF HAIR		*	
19	ARTEFACTS			*

	NARCO ANALYSIS	www.FirstRanker.com	*	
	BRAIN MAPPING		*	
21	FORENSIC PSYCHIATRY			
	WHO CLASSIFICATION PSYCHIATRIC DISORDERS		*	
	CLINICAL & MEDICOLEGAL ASPECTS OF PSYCHIATRIC DISORDERS	*		
	LEGAL ASPECTS OF PSYCHIATRIC DISORDERS	*		
	McNAUGHTANS RULE, Sec 84 ipc & ORS	*		
	LUCID INTERVAL	*		
	RESTRAINT OF THE MENTALLY ILL PERSON	*		
	THE MENTAL HEALTH ACT 1987		*	
	FEIGNED INSANITY		*	
22	TOXICOLOGY			
	GENERAL CONSIDERATIONS	*		
	THE LAW ON POISONS			*
	CLASSIFICATION	*		
	IDENTIFICATION OF POISONOUS PLANTS, SEEDS & ANIMALS	*		
	DIAGNOSIS OF POISONING IN LIVING & DEAD	*		



	PRESERVATION & DESPATCH OF EVIDENTIAL MATERIALS IN CASES OF SUSPECTED POISONING	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF CORROSIVE POISONS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF METALLIC POISONS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF NON METALLIC POISONS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF PLANT & ANIMAL POISONS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF AGRICULTURAL POISONS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF POISONS ACTING ON CARDIOVASCULAR SYSTEM	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF POISONS ACTING ON NERVOUS SYSTEM INCLUDING SPINAL CORD	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF INNEBRIANT POISONS AND CERTIFICATION OF DRUNKENNESS	*		
	SIGNS, SYMPTOMS, TREATMENT, AUTOPSY FINDINGS & MEDICOLEGAL ASPECTS IN CASES OF POISONS ACTING ON RESPIRATORY SYSTEM	*		
	FOOD POISONING : BACTERIAL, VIRAL, CHEMICAL & MUSHROOM		*	
	DRUG DEPENDANCE		*	

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