M.Phil Forensic Medicine (Part-I) PAPER I TABLE OF SPECIFICATIONS

The grey areas of the courses which cannot be covered or are difficult to cover in MCQ's shall be used for framing SEQ's, which may be split into two parts if necessary; attempt shall be made to avoid duplication between MCQ'S and SEQ's.

Distribution of MCQ's and SEQ's with respect to the importance of topics

		Topics	No. of MCQ's	No. of SEQ's
		Paper 1		
I.		GENERAL FORENSIC MEDICINE		
•		Laws related to medical man:		
	a)	Law and its types. Courts & its types, powers & jurisdiction. Important legal terms.		
	b)	Evidence act & evidence recording before the court of law, Guidelines for medical man when appearing in court as a witness.		
	c)	Statutes relevant to death investigation & medico-legal practice in Pakistan like Section 174 & 176 PPC; Relevant sections of Police rules 1934, Qisas & Diyat act 1997.		
	-	Death investigation systems in other countries like Coroner System, Medical Examiner System & Continental System.		
	e)	Statutes controlling medical practice like PMDC ordinance 1962, Allopathic system (Prevention of misuse) act 1962, Medical & dental degree ordinance 1982, Drug Act, The control of Narcotic substances Ordinance 1995.		
	f)	Ethical aspect of Medicine practice. Role of ethics while dealing with research, euthanasia & artificial insemination.		
	g)	Legal aspect of medical treatment like consent, medical negligence, professional secrecy & privileged communications, Injured persons (Medical aid) Act 2004, Human tissue & organ transplant Act 2007, Evolution of concept of compensation from common law torts to Social security Ordinance 1965. Medical Documents.	20	2
	h)	Statutes relevant to sexual assaults like Hadood Ordinance 1979, Protection of Women Act 2006.		·
	i)	Statutes for care & preservation of rights of mentally sick people like Mental Health Ordinance 2001.		
	j)	Statutes related to miscarriage like Isquat-e-Haml & Isquat-Janin.		
	k)	Statutes related to marital issues, like Child Marriage restrain Act 1989, Dissolution of Muslim marriage Act 1989. Muslim Family laws 1961.		

•	,	Personal Identity:		
ŀ	a)	Parameters of identification, methods of identification in		
		living and dead including decomposed, mutilated bodies,		
		fragmentary & skeletal remains.		
	b)	Role of various identification techniques like dentistry,		
		radiology, dactylography, superimposition photography,		
		DNA fingerprinting.		
	c)	Determination of age, sex & race by various methods & its		
		medico-legal aspects.		
		Trace Evidence:		
	a)	Application of Locard's principle of exchange in criminal		
	,	cases,	15	1
	b)	Study of crime scene; collection, preservation & dispatch of		_
	-)	trace evidence material to lab.		
	c)	Examination of biological specimens of forensic importance		
	ψ)	like Blood, Semen, Saliva, Vomitus, Breath, Urine, Hair &		
-		their examination in the laboratory.		
•	-)	Thanatology:		
	a)	Evolution of concepts regarding definition & diagnosis of		
	1 \	death.		
	,	Cause, manner, mode & mechanism of death.		
	c)	Death related issues like Death-Certification according to		
	.	WHO guidelines, & death registration.		•
	d)	Causes of sudden unexpected deaths with emphasis on		
		coronary heart diseases & neurogenic cardiovascular failure.		
	e)	Physico-chemical changes after death in various body		
		tissues, organs & fluids under different environmental		
		conditions.		-
	f)	Estimation of time since death.		
•		Autopsy:		
	a)	Types, objective, autopsy protocol, procedures/techniques		
		of autopsy.		
	b)	Post-mortem artifacts, Negative autopsy, risk and hazards &		
		precautions in autopsy practice.		
	c)	Collection, preservation, labelling & dispatch of biological		
		& non-biological materials to lab.		·
	d)	Establishment of Modern autopsy laboratory.		
		Procedure of exhumation, its value & limitations.		
•	-)	GenTraumatology:		
	a)	Definition of Wound, Mechanism of wound production,	30	3
	4)	classification, cause-effect relationship of various weapons	50	9
		including firearms & explosives.		
	ы	Age of wound.		
	,	Examination of injured person & certification of nature,		
	\cup_j	· · ·		
	4)	cause, manner and dating of wounds.		
İ	d)	Determination of complications, disability & cause of death		
	ر.	from wounds.		
	e)	Distinguish between self-inflicted, suicidal, homicidal &		
	0	accidental injuries.		
	-	Ante-Mortem & Post-Mortem injuries.		
	g)	Relationship of trauma to disease, Presumption of		
		survivorship & death.		

II.	FORENSIC PATHOLOGY		
a)	Morphology of various pathological conditions like		
(b)	Myocardial Infarction,		
(c)	Thrombo-embolism,		1 -
(d)	Pulmonary Infarction,		
(e)	Pneumonia,		
f)	Pulmonary Tuberculosis,	15	1
g)	Bronchogenic Carcinoma,		
h)	Pneumoconiosis,		
i)	Tumors of stomach and intestines,		
j)	Heavy metal Poisoning.		
III.	FORENSIC ANATOMY		
a)	Assessment of age, sex, race, stature & evidence of		
	trauma/poisoning from skeleton.		
(b)	Study of dentition for assessment of age.		
c)	Study of human & animal hair.		
d)	Fertilization & development of placent		
(e)	Assessment of foetal age.		
IV.	FORENSIC RADIOLOGY		
a)	Techniques of Radiology & their uses in Forensic Medicine		
	practices, Anesthesia Surgery, Radio therapy		

MCQ's = 80	Total Marks = 80	Time = 90 min
SEQ's = 7	Total Marks $= 70$	Time $= 90 \text{ min}$

Total Marks of the Paper = 150 Total Time = 3 Hours

Grand Total = 150

Department of Forensic Sciences
University of Health Sciences,
Lahore

M.Phil Forensic Medicine (Part-I) **PAPER II** TABLE OF SPECIFICATIONS

The grey areas of the courses which cannot be covered or are difficult to cover in MCQ's shall be used for framing SEQ's, which may be split into two parts if necessary; attempt shall be made to avoid duplication between MCQ'S and SEQ's.

Distribution of MCQ's and SEQ's with respect to the importance of topics

	Topics	No. of MCQ's	No. of SEQ's
	Paper 2		
I.	SPECIAL FORENSIC MEDICINE) Special Traumatology: Regional injuries, firearm & explosive injuries, Transportation injuries (Road traffic & railway accidents, Air crashes), Police torture injuries & custodial deaths.		
b	Environmental Hazards: Burns, electrocution, lightning, radiation, cold, heat, starvation.		
c	Asphyxial deaths: Classification & physio-chemico-pathological changes in asphyxia deaths. Suffocation, hanging, strangulation, throttling, sexual Asphyxia, Traumatic Asphyxia, Environmental Asphyxia, drowning, Scuba diving.	35	4
d	Medico-legal aspects of marriage: Virginity, impotence, pregnancy, delivery, legitimacy, contraception, Artificial insemination, abortion (Criminal & justified), nullity of marriage.		
e	Sexual Offences: Classification of sexual offences, Examination of offender & victim, Collection, preservation & dispatch of biological material to lab. Sexual perversions.		
f)	Crime against New-born/Infant/child: Infanticide, child abandonment, child abuse, still births, cot deaths.		
g			

I.	FORENSIC SEROLOGY		
	Morphology of human & other species RBCs.		
1	Blood group systems & Law of inheritance of blood group,		
0)	their role in resolving paternity & maternity issues.		
(2)	Forensic importance of Blood stains and their detection in		"
	lab.		
(h	Principles & techniques of various serological tests.		
	Application of Precipitin Test for detection of human		
	tissues.	10	1
6	Secretors & Non-Secretors.	10	
1 (
g)	Method of forward & backward blood grouping & cross		
1.5	matching.		
1 1	Hazards of blood transfusion.		
III.	FORENSIC BIOCHEMISTRY		
(a)	Clinical Biochemistry		
	Biochemical changes in muscles, blood, CSF & vitreous		
	after death. Biochemisty of asphyxia and drowning.		
	Biochemical changes in wounds.		
b)	Analytical Biochemistry		
	Analytical techniques for detection of drugs & poisons.		
	Principles of modern techniques like Spectrophotometry,		
,	Flame photometry, Chromatography, & Electrophoresis.		
c)	Genetics		
	Structure of DNA, its replication, profiling & its role in		
	Forensic Medicine. Methods of collection & preservation of		-
	samples to be sent to DNA laboratory.		

IV.	FORENSIC TOXICOLOGY		
a)	General Toxicology:		
•	Definition, scope, & classification of Poisons.		
•	Drug dependence.		
•	Diagnosis of intoxicated cases in acute and chronic exposure in living and dead.		
•	Factors affecting outcome of an intoxicated patient.		
•	General management of case of poisoning & the legal duties of a Doctor in handling such cases.		
b)	Specific Poisons:		
	Poisons/drugs of abuse prevailing in our society & their medico-legal aspects.	35	
•	Alcohol		
•	Opiates & other Narcotics		
•	Salicylates & Paracetamol		2
•	Hypnotics & 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, Phorsphorus		
•	Volatile poisons, Carbon-monoxide, & Hydro-Carbons		
•	Cyanides		
•	Corrosives – Hydrochloric Acid, Nitric Acid, Sulfuric Acid,		
	Oxalic Acid, Carbolic Acid, & Alkalies		
•	Pesticides, Herbicides & Insecticide		

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Total Marks of the Paper

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