Competency-Based Dynamic Curriculum for MD/ MS Unani (PRESCRIBED BY NCISM) Semester II Applied Basics of Tibbul Qanoon wa Ilmul Samoom (Forensic Medicine and Clinical Toxicology) (SUBJECT CODE : UNIPG-AB-TQS) (Applicable from 2024-25 batch, from the academic year 2024-25 onwards until further notification by NCISM)





BOARD OF UNANI, SIDDHA AND SOWA-RIGPA NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE NEW DELHI-110026

Preface

Tibbul Qanoon wa Ilmus Samoom (Forensic Medicine and Toxicology) is an specialized field of Medical Sciences that is pivotal in the context of law enforcement, criminal investigations, and legal proceedings. Tibbul Qanoon (Forensic Medicine) focus on how these fields are used in real-world situations to assist legal cases, criminal investigations and in the understanding of standard operating procedures of scene of crime, injuries or death. Toxicology, on the other hand, serves as the scientific gateway into understanding the impact of poisons, toxins, environmental toxic agents, chemicals and venom on the human body, particularly when such substances are involved in crimes like poisoning, overdoses, or illicit drug abuse.

The envisioned syllabus sight sees the intersection of Tibbul Qanoon wa Ilmus Samoom. The journey will begin by addressing the origin, developments, historical perspectives, basics, fundamentals, principles, medico legal systems, newly replaced laws, allied and the applied aspect of the subject. Importance is also being given to medical ethics so that the learners will comprehend the crucial role that doctors play in maintaining the integrity of the legal system while upholding the duty, dignity and Medical Etiquettes of those they serve. The learners will also reconnoitre another crucial aspects of Ilmus Samoom of Unani fundamentals i.e., Tiryaq (antidotes) its identification, formulations, preparation and application that counteract the harmful effects of poisons, as Tiryaq play a pivotal role in saving lives, preventing damage, and mitigating the effects of exposure to toxic substances, ranging from chemicals and drugs to biological toxins.

In today's scenario skilled forensic profession is a burgeoning arena and the Postgraduate course in Tibbul Qanoon wa Ilmus Samoom will be an endorsement for those wishing to advance their expertise in this rewarding meadow and in the designing of this syllabus it was taken under significant consideration. The syllabus is being designed so that the students will learn in-depth the subject of Clinical, Pathological, Environmental and Analytical Toxicology. The learner will become proficient to analyse biological samples for the presence of toxic substances, such as drugs, alcohol, or poisons. It provides envisioned opportunity to learn from experienced professionals in real-world settings and enhances their practical knowledge. It provides multidisciplinary approach, fostering collaboration between different sectors of medical sciences. It offers students an opportunity to delve deeper into the complex and multifaceted aspects of the field, beyond what is covered in undergraduate studies. It enhances critical thinking, analytical skills, and the ability to offer unbiased, scientifically supported opinions that are decisive to provide justice. Completing a designed curriculum in Forensic Medicine can significantly improve job prospects, professional competences, skills, capabilities and abilities.

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NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE) Competency-Based Dynamic Curriculum for MD/ MS Unani Applied Basics of Tibbul Qanoon wa Ilmul Samoom (UNIPG-AB-TQS) Summary & Credit Framework Semester II

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
M 1. طب القانون کے مبادیات، طب القانونی نظام اور اس کاطریقہ کار mabadiyat, Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal system and its procedure)	3	90	75
M 2. طب القانون ميں شاخت کی اہمیت (Significance of Identification in Forensic Medicine)	3	90	75
M 3. ^{اعل} م السموم تح مباديات اوربنياد بي اصول السموم تح مباديات اوربنياد بي الصول Bunyadi Usool (Basic Principles & Fundamentals of Toxicology)	2	60	50
M 4. اعلان سمیت کے بنیاد کا صول العالی المان سمیت کے بنیاد کا صول of Management of poisoning)	2	60	50
M 5. طبالقانون میں شرائق علوم کے مبادیات کالطلاق Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-I	2	60	50
M 6. طب القانون ميں شرائق علوم کے مباديات کالطلاق Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-II	2	60	50
M 7. يبيثه وارانه سلوك وآداب اورطبى وتحقيقاتى اخلاقيات. M 7 Aadab aur Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics)	2	60	50
	16	480	400

Credit frame work

UNIPG-AB-TQS consists of 7 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Important Note: The User Manual MD/MS Unani is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding the curriculum, write to syllabus24uni@ncismindia.org.

Course Code and Name of Course

Course code	Name of Course
UNIPG-AB-TQS	Applied Basics of Tibbul Qanoon wa Ilmul Samoom (Forensic Medicine and Clinical Toxicology)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) UNIPG-AB-TQS At the end of the course UNIPG-AB-TQS, the students should be able to	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Appraise Unani approach and contemporary scientific knowledge of the environmental toxic substances and their toxicity.	PO1,PO4,PO5,PO8
CO 2	Illustrate toxic conditions, bites or stings; their diagnosis, emergency care, management including poisonous condition of unknown origin.	PO1,PO2,PO6,PO8
CO 3	Prepare appropriate antidote for the management of toxicity and associated complications.	PO1,PO6,PO8
CO 4	Analyse the safety of Unani drugs and food toxicity, conduct evidence-based research and manage pharmacovigilance.	PO1,PO4,PO6,PO7,PO8
CO 5	Demonstrate the ability to impart knowledge in forensic medicine, medical jurisprudence, forensic psychiatry, and allied sciences, while effectively addressing ethical dilemmas in medical practice through case studies and ethical reasoning frameworks.	PO1,PO5,PO8

Table 2 : Course contents (Modules- Credits and Notional Learning Hours)

	2B Module & units		Notional Learning Hours				
2A Module Number		2C Number of Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total	
	M-1 طب القانون تظم اوراس كاطريقد كار Tibbul Qanoon ke mabadiyat, Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal system and its procedure)						
	This module includes the basic knowledge of medical Jurisprudence, the Medico-legal system, its procedure and implementation. The module will enhance a better understanding of the Medical Jurisprudence Medico-legal system.						
	• M1.U1 تعادف،ابتدااورارتقا Ta'aruf, Ibtida aur Irtiqa (Introduction, Origin & Development)						
	طب القانون كا تعارف 1.1.1						
	Tibbul Qanoon ka Ta'aruf						
1	(Introduction of Medical Jurisprudence).	3	15	30	45	90	
	طب القانون کی ابتدا اور ارتقا 1.1.2						
	Tibbul Qanoon ki Ibteda aur Irtiqa						
	(Origin and development of Tibbul Qanoon).						
	• M1.U2 بداف، مقاصد اور مواقع Ahda'af, Maqasid aur Mawaqai (Aims, Objectives & Scope)						
	طب القانون کے اہداف اور مقاصد 1.2.1						
	Tibbul Qanoon ke Ahdaaf aur Maqasid						

(Aims and objectives of Medical Jurisprudence).			
طب القانون کے مواقع 1.2.2			
Tibbul Qanoon ke Mawaq'e			
(Scope of the Medical Jurisprudence).			
• M1.U3 بندوستانى طب القانونى نظام Hidustani Tibbul Qanooni Nizam (Medico-legal system in India)			
ہندوستانی طب القانونی نظام کا تعارف اور اس کا طریقہ کار1.3.1			
Hindustani Tibbul Qanooni Nizam ka Ta'aruf aur uska Tareeqa-e-kar			
(Introduction of Medico-legal system in India and its Procedure).			
انتظامی دهانچه ، اختیارات، کردار، جواب دبی اور عهده داران 1.3.2			
Intizami Dha'ncha, Akhtiyaraat, Kirdaar, Jawabdehi aur Ohdah daran			
(The administrative set-up, powers, roles, responsibilities and functionaries).			
طب القانونی نظام سے متعلقہ قانونی <i>اعدال</i> تی کاروائیوں کی وضاحت ۔1.3.3			
Tibbul Qanooni Nizam ki Qabile Itlaaq Qanooni/Adaalati karwayion ki Wazahat.			
(Description of relevant legal/court procedures applicable to medico-legal/medical practice).			
تفتیش اور اس کی اقسام کی تفصیلی معلومات 1.3.4			
Tafteesh aur uski Aqsaam ki Tafseeli ma'loomaat			
(Detailed knowledge of inquest and its types).			
عدالت ميں انضباط شہادت كا طريقہ كار 1.3.5			

Adalat men Inzibate Shahadat ka Tareeqa-e-kar			
(Procedure of evidence recording in court).			
• M1.U4 طب القانوني دستاويز کاري اور کاروائيال Tibbul Qanooni Dastavezkari aur Kar'wayian (Legal documentation and Procedure in Forensic Sciences)			
قانونی دستاویز کا تعارف 1.4.1			
Qanooni Dastawaiz ka Ta'aruf			
(Introduction of legal document).			
قانونی شواہد اور ان کا طریقہ انضباط 1.4.2			
Qanooni Shawahid aur ka Treeqae Inzibaat			
(Medical evidences and their recording procedures).			
رضامندی کا جائزہ اور اطلاعی رضامندی کے اصول 1.4.3			
Razamandi ka Jayezah aur Ittilayi Razamandi ke Usool			
(Overview of consent and rules of informed consent).			
پیشہ طبابت پر عدالتی کاروائیوں کا اطلاق 1.4.4			
Tababat par Itlaqui Adalati Karwayian			
(Court procedures applicable to Medicolegal practices)			
عدالت ميں انضباط شہادت كا طريقہ 1.4.5			
Adalat men Inzibate Shahadat ka Tareeqa			

(Procedure of evidence recording in court).			
ماہر گواہ کے طور پر ایک طبیب کا کردار اور ذمہ داریاں 1.4.6			
Mahir gawah ke taur par ek Tabeeb ka Kirdar aur Zimmedariyan			
(Roles and responsibilities of a doctor as expert witness).			
 Muta'alliqa Qawaneen Bara'e Tababat (Acts Related to Medical متعلقہ قوانین برائے طبابت Muta'alliqa Qawaneen Bara'e Tababat (Acts Related to Medical Practice) 			
1.5.1 Provisions of the following acts in Forensic Medicine:			
1.5.1.1 The Prenatal Diagnostic Techniques (PNDT) Act, 1994, and its amendments.			
1.5.1.2 The Transplantation of Human Organs Act, 1994.			
1.5.1.3 The Protection of Children from Sexual Offences (POCSO) Act 2004			
1.5.1.4 The Bhartiya Nyaya Sanhita, 2023			
1.5.1.5 Bhartiya Sakshya Adhiniyam, 2023			
1.5.1.6 Bhartiya Nagarik Suraksha Sanhita, 2023			
1.5.1.7 Provisions and relevance of the Clinical Establishment Act, 2010 applicable to AYUSH practitioners.			
 M1.U6 تغيرت كاذبه بعدالموت Taghayyurate Kaziba B'adal Maut(Post mortem artefacts) 			
1.6.1 Artefacts Due to Post-mortem Changes.			
1.6.2 Third Party Artefacts.			
1.6.3 Environmental Artefacts.			

	1.6.4 Other Artefacts.					
	 M1.U7 طب القانون وعلم السموم مين جديد اضافات Tibbul Qanoon wa Ilmus Samoom mein Jadeed Izafat (Modern advances in Forensic Medicine and Toxicology) 					
	1.7.1 Polygraph test and its procedure.					
	1.7.2 Brain Fingerprinting.					
	1.7.3 Narco-Analysis test, its principles and procedure.					
	M-2 طبالقانون عي شاخت کی انميت Tibbul Qanoon me Shanakht ki Ahmiyat (Significance of Identification in Forensic Medicine)					
	The module includes the application of knowledge of Forensic Medicine in the identification of living and dead.					
	• M2.U1 منطى، زمین اورجنسی شاننت Nasli, Mazhabi aur Jinsi Shanakht (Identification of race, religion and sex)					
	شاخت نسل 2.1.1					
	Shanakhte Nasl					
2	(Identification of Race)	3	15	30	45	90
	شانن ت م رّ <i>ب</i>					
	Shanakhte Mazhab					
	(Identification of Religion)					
	شاخت عبس 2.1.3					
	Shanakhte Jins					
	(Identification of Race) 2.1.2 شانت مذہب Shanakhte Mazhab (Identification of Religion) 2.1.3 شانت عنس Shanakhte Jins					

	(Identification of Sex).			
•	M2.U2 جنس نووی دمیانی ادرعکم الشعر Jinse Nouvi wa Mayani aur Ilme Sha'r (Nuclear sexing, Intersex and trichology)			
	جنس نوی و میانی کی شاخت 2.2.1			
	Jinse Nau'vi wa Mayani ki Shanakht			
	(Identification of Nuclear sexing and Intersex).			
	مردہ ڈھانچہ سے جنس کی شاننت 2.2.2			
	Murdah Dhanche se Jins ki Shanakht			
	(Identification of sex from skeletal remains.)			
	بالوں کی مدد سے شانست 2.2.3			
	Balon ki madad se Shanakht			
	(Identification with help of hair samples.)			
•	Umr ka Tayyun (Estimation of Age) عر تغیین Umr ka Tayyun (Estimation of Age)			
	شاخت میں عمر کی اہمیت 2.3.1			
	Shanakht men Umr ki Ahmiyat			
	(Importance of age in identification).			
	تعظم سے عمر کا تعین 2.3.2			
	Ta'azzum se umr ka Ta'ayyun			

(Estimation of Age from ossification of bones).
بالغول مين عمر كالتعين 2.3.3
Balighon men umr ka Ta'ayyun
(Determination of age in adults).
لتعین عمر کی طبق قانونی اہمیت 2.3.4
Ta'ayyune umr ki Tibbi Qanooni Ahmiyat
(Medico-legal importance of estimation of age).
• M2.U4 قدوقامت، ندبه اوروشی نشانات Qado Qamat, Nadba aur Washmi Nishanat (Stature, Scar and Tattoo Marks)
شاخت میں قدوقامت، وشی نشانات اور ندبہ کی اہمیت 2.4.1
Importance of stature, scar and tattoo marks in identification.
• M2.U5 نشانات انگشت اور تنظیر مسامات Nishanate Angusht aur Tanzeere Masamat (Dactylography & Poroscopy
انگشت نیگاری 2.5.1
Angusht Beeni/Angusht Nigari
(Dactyloscopy/dactylography).
تنظير المسلات 2.5.2
Tanzeerul Masamaat
(Poroscopy).

	شانات یا 2.5.3					
	Nishanate Pa					
	(Foot prints)					
	• M2.U6 بتظير شيل يانثانت لب Jism paimayi aur Tanzeere Shiyl ya Nishanate lub (Anthropometory and Cheiloscopy)					
	جسم پیمانی)بر ٹیلان مسلم(2.6.1					
	Jism Paimayi (Bertilon's System)					
	(Anthropometory (Bartilons's system)					
	نثانات لب 2.6.2					
	Nishanate Lub					
	(Cheiloscopy)					
	M-3 العم السموم كرمباديات اورينياد كااصول Ilmus Samoom ke Mabadiyaat aur Bunyadi Usool (Basic Principles & Fundamentals of Toxicology)					
	The module includes the knowledge about the basic principles, introduction, origin, development and classification of poisons.					
	• M3.U1 علم السموم كے مبادیات Ilmus Samoom ke Mabadiyat (Basics of Toxicology)					
3	علم السموم کے بنیادی اصول 3.1.1	2	10	20	30	60
	Ilmus Samoom ke Bunyadi Usool					
	(Basic principles of Ilmul Samoom).					
	علم السموم كا تعارف 3.1.2					

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	Ilmus Samoom ka Ta'aruf			
	(The introduction of Ilmus Samoom).			
	علم السموم کی ابتداء اور ارتقاء 3.1.3			
	Ilmus Samoom ki Ibtida aur Irtiqa			
	(Origin & development of Ilmus Samoom).			
	علم السموم کے مستقبل کے امکانات 3.1.4			
	Ilmus Samoom ke Mustaqbil ke Imkanaat			
	(Future prospects of Ilmus Samoom)			
•	M3.U2 موم کے طب القانونی پیلواوران کی درجہ بند ی Samoom ke Tibbe Qanooni Pehlu aur unki Darjabandi (Medico-legal aspects and classification of Poisons)			
	سموم کی طب القانونی اہمیت 3.2.1			
	Samoom ki Tibbul Qanooni Ahmiyat			
	(Medico-legal aspects of Poisons).			
	سموم کی تقسیم 3.2.2			
	Samoom ki Taqseem			
	(Classification of Poisons).			
٠	M3.U3 ^{تشخی} ص می ت T ashkheese Sammiyat (Diagnosis of poisoning)			
	زندوں میں زہرخورانی کی تشخیص 3.3.1			

	Zindon men Zahrkhoorani Ki Tashkhees					
	(Diagnosis of poisoning in living).					
	مردوں میں زہرخورانی کی تشخیص 3.3.2					
	Murdon men Zahrkhoorani ki Tashkhees					
	(Diagnosis of poisoning in the dead).					
	انکشاف زہر میں ناکامی 3.3.3					
	Inkeshafe Zahr men Nakami					
	(Failure to detect poison).					
	• M3.U4 سمياتى درجه بندى Sammiyati Darjabandi (Toxicological Classification)					
	سموم کے درجا ت 3.4.1					
	Samoom ke Darajaat					
	(Categories of poisons).					
	M-4 اعلان سميت کے بنياد کاصول Ilaje Sammiyat ke Bunyadi Usool (Basics of Management of poisoning)					
	The module includes knowledge about the basics of management of poisoning and its related laws.					
4	 M4.U1 اعلان سمیت کے عمومی اصول العادی العادی العادی العادی العادی العادی العادی العادی العادی العاد (General principles of management of poisoning) 	2	10	20	30	60
	علاج سمیت کے عمومی اصول 4.1.1					
	Ilaje Sammiyat ke Umoomi Usool					

	(General principles and management of poisoning).					
	تریا قات کے مبادیات اور ان کا استعال 4.1.2					
	Tiryaqat ke Mabadiyat aur unka Istemal					
	(Basics of Tiryaqat and their use).					
	• M4.U2 مومو تسمم مشخلق بندومتاني قوانين Samoom wa Tasammum se Mutalliq Hindustani Qawaneen (Laws related to Poison and Poisoning in India)					
	4.2.1 Overview of the following acts related to poison and poisoning in India:					
	4.2.1.1 The Poison Act 1919					
	4.2.1.2 The Drugs and Cosmetics Act, 1940					
	4.2.1.3 The Drugs and Cosmetics Rules, 1945					
	4.2.1.4 The Pharmacy Act 1948					
	4.2.1.5 The Drug Control Act, 1950					
	4.2.1.6 The Drug and Magic Remedies (Objectionable Advertisement) Act, 1954					
	4.2.1.7 The Prevention of Food Adulteration Act 1954					
	4.2.1.8 The Medicinal and Toilet preparation (Excise Duty) Act, 1955					
	4.2.1.9 The Food Safety and Standards Act 2006.					
	M-5 طب القانون ميش التى علوم کے مبادیات کالطلاق Tibbul Qanoon men Sherakati Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-I					
5	This module gives information about the basics of applied Anatomy, Physiology, Dentistry, and Radiology in Forensic Medicine.	2	10	20	30	60

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5.1.1 Surface landmarks & regional anatomy of medico-legal significance الالله الله الله الله الله الله الله ال	lied Forensic	 M5.U1 الطلاق تشريح قانوني اورشعائيات tlaqi Tashreehe Qanooni aur Shuaiyate Anatomy and Radiology) 	
5.1.2 Comparative anatomical study of Male & Female skeletons. المالية المحكمة	ice	5.1.1 Surface landmarks & regional anatomy of medico-legal signi	
5.1.3 Anatomy of the neck with special reference to violent asphyxial deaths.5.1.4 Anatomy of reproductive organs.5.1.5 Gross anatomy of heart and coronaries.5.1.6 Outline of embryonic/fetal development.5.1.7 Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin)5.1.8 Understand different radiological procedures, i.e. X-ray, CT scan, for the solution of medico-legal problems.• M5.U2 (Juliani Munafeul Aaza Qanooni (Applied Forensic Physiology)5.2.1 Overview of Physiology of menstruation & pregnancy.5.2.2 Overview of Physiology of Thermo-regulation.5.2.3 Homeostasis, Blood grouping & Rh system5.2.4 Medico-legal aspects of allergy and anaphylaxis.5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal 		5.1.2 Comparative anatomical study of Male & Female skeletons.	
5.1.4 Anatomy of reproductive organs. المعالي	eaths.	5.1.3 Anatomy of the neck with special reference to violent asphyx	
 5.1.5 Gross anatomy of heart and coronaries. 5.1.6 Outline of embryonic/fetal development. 5.1.7 Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin) 5.1.8 Understand different radiological procedures, i.e. X-ray, CT scan, for the solution of medico-legal problems. M5.U2 العلق العلق العلق العلق المعامة العلق العلق العلق العلق التحقيق المعامة العلق المحقيق المعامة العلق المحقيق المحق المحقيق المحقيق ا		5.1.4 Anatomy of reproductive organs.	
 5.1.6 Outline of embryonic/fetal development. 5.1.7 Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin) 5.1.8 Understand different radiological procedures, i.e. X-ray, CT scan, for the solution of medico-legal problems. M5.U2 الطائل العالي العالي 1.2.1 Overview of Physiology of Thermo-regulation. 5.2.3 Homeostasis, Blood grouping & Rh system 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoletic, Nervous, Di		5.1.5 Gross anatomy of heart and coronaries.	
 5.1.7 Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin) 5.1.8 Understand different radiological procedures, i.e. X-ray, CT scan, for the solution of medico-legal problems. M5.U2 • M5.U2 • Munafeul Aaza Qanooni (Applied Forensic Physiology) 5.2.1 Overview of Physiology of menstruation & pregnancy. 5.2.2 Overview of Physiology of Thermo-regulation. 5.2.3 Homeostasis, Blood grouping & Rh system 5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System. 		5.1.6 Outline of embryonic/fetal development.	
5.1.8 Understand different radiological procedures, i.e. X-ray, CT scan, for the solution of medico-legal problems. • M5.U2 • M5.U2 • 5.2.1 Overview of Physiology of menstruation & pregnancy. 5.2.2 Overview of Physiology of Thermo-regulation. 5.2.3 Homeostasis, Blood grouping & Rh system 5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.	h as brain, heart,	5.1.7 Microscopic anatomy (histology of different organs & tissues lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin)	
 M5.U2 5.2.1 Overview of Physiology of menstruation & pregnancy. 5.2.2 Overview of Physiology of Thermo-regulation. 5.2.3 Homeostasis, Blood grouping & Rh system 5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System. 	ι, for the solution of	5.1.8 Understand different radiological procedures, i.e. X-ray, CT medico-legal problems.	
5.2.1 Overview of Physiology of menstruation & pregnancy. Image: Second sec	Physiology)	• M5.U2 الطلاقى منافع الاعضا قانونى Itlaqi Munafeul Aaza Qanooni (Applied Forei الطلاقى منافع الاعضا قانونى	
5.2.2 Overview of Physiology of Thermo-regulation. 5.2.3 Homeostasis, Blood grouping & Rh system 5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.		5.2.1 Overview of Physiology of menstruation & pregnancy.	
5.2.3 Homeostasis, Blood grouping & Rh system 5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.		5.2.2 Overview of Physiology of Thermo-regulation.	
5.2.4 Medico-legal aspects of allergy and anaphylaxis. 5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.		5.2.3 Homeostasis, Blood grouping & Rh system	
5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.		5.2.4 Medico-legal aspects of allergy and anaphylaxis.	
	y, Respiratory, lusculoskeletal	5.2.5 The gross applied physiology of forensic importance of Circu Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genit System.	

	 M5.U3 الطلاقى علم الاسنان قانونى 10 Itlaqi Ilmul Asnan Qanooni (Applied Forensic Dentistry) 					
	5.3.1 Introduction of oral anatomy, morphology and its characteristics.					
	5.3.2 The development & wear patterns of teeth.					
	5.3.3 The relevance of forensic dentistry in identifying human remains, age, sex and race.					
	M-6 طبالقانون میں شرائق علوم کے مبادیات کالطلاق Tibbul Qanoon me Sherakati Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-II					
	This module gives information about the forensic importance of pathology, Biochemistry and various kinds of insects.					
	• M6.U1 الطلاقى علم الامراض قانونى Itlaqi Ilmul Amraz Qanooni (Applied Forensic Pathology)					
	6.1.1 Pathology of cell/tissues—Degenerative changes & secondary changes, atrophy, hypotrophy, aplasia, hyperplasia, ischemia, necrosis, infarction, cloudy swelling, amyloidosis and embolism, asphyxial deaths, electricity, gunshot wounds, poisoning, thrombo-embolism, fat embolism, aspirations, wound healing, histological determination of time of death.					
6	6.1.2 Body's local and systemic response to trauma.	2	10	20	30	60
	6.1.3 Healing and fibrosis (Pathology of scar)					
	6.1.4 Common general and systemic diseases caused by physical/chemical agents.					
	6.1.5 Disorders of infancy and old age changes relevant to forensic medicine.					
	6.1.6 Pathology-Gross and Microscopic—in myocardial infarction, congenital heart diseases, tuberculosis, cirrhosis, malnutrition, and starvation.					
	• M6.U2 اطلاق کیمیادحیویہ قانونی Itlaqi Kimyaye Haiwiya Qanooni (Applied Forensic Biochemistry)					
	6.2.1 Forensic biochemistry of saliva, Semen, Sweat, CSF.					

	6.2.2 Procedure of collection of body fluids from a dead body.					
	6.2.3 Role of biochemistry in investigating the scene of crime.					
	6.2.4 DNA as evidence.					
	• M6.U3 اطلاقی خورد حیاتیات وعلم الحشرات قانونی Itlaqi Khurdhayatyat wa ilmul Hashrat Qanooni (Applied Forensic Microbiology and Entomology)					
	6.3.1 Microbiology of Proteobacteria, Firmicutes related to Cadavers.					
	6.3.2 Microbiology of Bacteroidetes and Actinobacteria related to Cadavers.					
	6.3.3 Preparation and demonstration of the slides after taking secretions from a dead body and identification of microorganisms.					
	6.3.4 Details of flies (Diptera) and beetles (Coleoptera).					
	6.3.5 Forensic importance of flies (Diptera) and beetles (Coleoptera) to determine the time of death.					
	6.3.6 Factors responsible for the evolution of insects and arthropods in a cadaver.					
	6.3.7 The role of insects found in a dead body to determine Post Mortem Interval (PMI).					
	M-7 يش وارانه سلوك وآداب اورطبى وتحقيقانى اخلاقيات Peshawarana Sulook wa Aadab aur Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics)					
	The module includes the Unani and modern knowledge of Professional Conduct, Etiquettes & Medical and Research Ethics.					
7	 M7.U1 طبن اخلاقیات Tibbi Akhlaqiyat (Medical Ethics) 	2	10	20	30	60
	طبی اخلاقیات اور طب یونانی میں اخلاقیات 1.1					
	Tibbi Akhalqiyaat aur Tibbe Unani men Akhlaqiyaat					

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(Medical Ethics and ethics in Unani Medicine)			
طبی اخلاقیات کی اہمیت اور پیشہ طبابت کی عظمت و شرافت 7.1.2			
Tibbi Akhlaqiyaat ki ahmiyat aur Pesha-e-tababat ki Azmat wa Sharafat			
(Importance of medical ethics, Greatness and nobility of medical profession)			
اخلاقی ضوابط 7.1.3			
Akhlaqi Zawabit			
(Ethical codes)			
ضابطه ^ح وراني 7.1.3.1			
Zabta e Hammurabi.			
(The codes of Hammurabi)			
معاہدہ بقراطیہ پانچویں صدی 7.1.3.2			
C Panchveen Sadee			
(Hippocratic oath 5th century)			
معاہدہ بقر اطبیہ)اردو ترجمہ 7.1.3.3			
Moahida e Buqratiya (urdu Turjuma)			
Hippocratic Oath (Urdu translation)			
ضابطہ نورمبرگ - 1948 7.1.3.4			
Zabta e Nuremberg 1948			

(Nuremberg code 1948)		
جنيوا اعلانيه-1948 - 7.1.3.5		
Geneva Elaniyah-1948		
(Declaration of Geneva- 1948)		
حقوق انسانی کا عالمگیر اعلانیہ-1948 7.1.3.6		
Haqooqe Insani ka Alamgeer Elaniyah-1948		
(Universal declaration of human rights- 1948)		
بلستگی اعلانی _ہ - 1964 - 7.1.3.7		
Hesinki Elaniyah-1964		
(Helsinki declaration 1964)		
طبی اخلاقیات کا بین الاقوامی ضائطہ 7.1.3.8		
Tibbi Akhlaqiyaat ka bainul Aqwami zabtah		
(International code of medical ethics)		
روداد بلمانت 7.1.3.9		
Rudade Belmont		
(Belmont report)		
7.1.3.10 Indian medical council (professional conduct, Etiquettes and ethics) regulations 2002		
7.1.3.11 Ethical codes for the physicians as constituted by the Central Council for Indian		

System of Medicine (CCIM)/National Commission for Indian System of Medicine (NCISM)			
7.1.4 Medical ethics about organ transplantation, biomedical human research and experimentation, human rights, cloning, genetic engineering, human genome, citizens' charter and International codes of medical ethics.			
7.1.5 Ethics about artificial insemination, abortion, antenatal sex, foetus, genetics and euthanasia.			
اخلاقیات صحت عامه 7.1.6			
Akhlaqiyate Sehate Ammah			
(Public health ethics.)			
• M7.U2 يشيرواراند سلوك اورطبي آداب Peshewarana Sulook aur Tibbi Aadab (Professional Conduct and Medical Etiquettes)			
7.2.1 Introduction			
7.2.2 Standards of professional conduct			
7.2.3 Characteristics of medical physicians/students			
7.2.4 Duties of the physicians as per Unani medicine.			
7.2.5 Acts of professional misconduct.			
7.2.6 Patient confidentiality,			
7.2.7 Honesty & integrity and medical negligence			
7.2.8 ABC's of Etiquettes, i.e. Appearance, Behaviour, Communication			
7.2.9 Duties of practitioner to public and paramedical profession			

7.2.10 Professional malpractice			
7.2.11 Consent			
7.2.11.1 Doctrine of full disclosure			
7.2.11.2 Doctrine of informed refusal			
7.2.11.3 Therapeutic privilege			
7.2.11.4 Loco parentis			
7.2.11.5 Emergency Doctrine			
7.2.11.6 Vicarious Liability			
• M7.U3 تحقيقاتى اخلاقيات Tehqeeqati Akhlaqiyat (Research Ethics)			
7.3.1 Introduction			
7.3.2 Aims and objectives			
7.3.3 Importance of Research Ethics			
7.3.4 Main areas of Focus in Research ethics			
7.3.4.1 Integrity			
7.3.4.2 Research misconduct (falsification, fabrication and plagiarism)			
7.3.4.3 Collaboration issues (authorship, data ownership and management)			
7.3.4.4 Peer review			
7.3.4.5 Conflicts of interest or obligation			

7.3.4.6 Complicity and funding sources					
7.3.4.7 Human subject research					
7.3.4.8 IEC & Board of Research					
	16	80	160	240	480

 Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods			
ہہ کار : Module 1 system and its	Module 1 : طبالقانونی نظام اوراس کاطریقه کار Tibbul Qanoon ke mabadiyat, Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal طب القانون کے مبادیات، طب القانونی نظام اوراس کاطریقه کار system and its procedure)								
Module Learni (At the end of t	ng Objectives he module, the students should be able to)								
 Describe Medical Jurisprudence and the Medico-Legal System. Demonstrate the procedure of Medical Jurisprudence. Illustrate the implementation of Medical Jurisprudence. 									
ابتراادرارتقا Unit 1	Ta'aruf, Ibtida aur Irtiqa (Introduction, Origin & Development) تعارف								
ن کا تعارف 1.1.1	طب القانور								
Tibbul Qanoon	ı ka Ta'aruf								
(Introduction o	f Medical Jurisprudence).								
ابتدا اور ارتقا 1.1.2	طب القانون کی								
Tibbul Qanoon	Tibbul Qanoon ki Ibteda aur Irtiqa								
(Origin and de	(Origin and development of Tibbul Qanoon).								
References: 1,	References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,61,65,84								
3A	3B	3C	3D	3E	3F	3G			
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CO 5	Discuss the doctrine of Tibbul Qanoon, its historical perspective and prospects.	2	Lecture	СК	Knows- how	DIS,L,L&GD,L&PPT		
Unit 2 المراف مقاصد اورمواقع Ahda'af, Maqasid aur Mawaqai (Aims, Objectives & Scope)								
طب القانون کے اہداف اور مقاصد 1.2.1								
Tibbul Qanoo	n ke Ahdaaf aur Maqasid							
(Aims and obj	ectives of Medical Jurisprudence).							
ن کے مواقع 1.2.2	طب القانون کے مواقع 1.2.2							
Tibbul Qanoo	n ke Mawaq'e							
(Scope of the	Medical Jurisprudence).							
References: 1	References: 1,2,3,4,5,6,7,8,9,10,12,13,14,15,16,17,19,20,21,61,65,72,83,84							
3A	3В	3C	3D	3E	3F	3G		
CO 5	Describe the Aims, Objectives & Scope of Tibbul Qanoon.	2	Lecture	ск	Knows- how	L,L&GD,L&PPT ,PL		
قانونی نظام Unit 3	ل Unit 3 المعاني المعالي العانوني القام Hidustani Tibbul Qanooni Nizam (Medico-legal system in India)							
ا طريقه کار1.3.1	ہندوستانی طب القانونی نظام کا تعارف اور اس کا طریقہ کار 1.3.1							
Hindustani Tibbul Qanooni Nizam ka Ta'aruf aur uska Tareeqa-e-kar								
(Introduction of Medico-legal system in India and its Procedure).								
انتظامی د هانچه ، اختیارات، کردار، جواب دبی اور عهده داران 1.3.2								
Intizami Dha'ncha, Akhtiyaraat, Kirdaar, Jawabdehi aur Ohdah daran								
(The administrative set-up, powers, roles, responsibilities and functionaries).								

Tibbul Qanooni Nizam ki Qabile Itlaaq Qanooni/Adaalati karwayion ki Wazahat.

(Description of relevant legal/court procedures applicable to medico-legal/medical practice).

Tafteesh aur uski Aqsaam ki Tafseeli ma'loomaat

(Detailed knowledge of inquest and its types).

عدالت میں انضباط شہادت کا طریقہ کار 1.3.5

Adalat men Inzibate Shahadat ka Tareeqa-e-kar

(Procedure of evidence recording in court).

References: 44,46,50,55,57,58,63,64,65,69,70,79,82,83,84

3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the Medico-legal system of India, its administrative set up, powers, roles, responsibilities and functionaries.	2	Lecture	СК	Knows- how	L,L&GD,L&PPT ,L_VC,PL
CO 5	Demonstrate the procedure of recording Oral/documentary evidence in a moot court presentation.	3	Practical1.1	PSY- SET	Shows- how	BS,DIS,FC,L&GD,RP
CO 5	Prepare the report on the functionality of the Police station and its officers, with special reference to various inquiries and legal examinations by visiting the Police station.	4	Experiential- Learning1.1	AFT- VAL	Does	BS,FV,LS,SDL
CO 5	Justify the importance of consent in the legal system.	4	Experiential- Learning1.2	AFT- VAL	Shows- how	DIS,LS,RP,TBL
ركاردائيال Unit 4	Tibbul Qanooni Dastavezkari aur Kar'wayian (Legal documentation and P طب القانونى دستاه يزكارى او	rocedure in F	orensic Scienc	es)		·

قانونی دستاویز کا تعارف 1.4.1

Qanooni Dastawaiz ka Ta'aruf

(Introduction of legal document).

قانونی شواہد اور ان کا طریقہ انضباط 1.4.2

Qanooni Shawahid aur ka Treeqae Inzibaat

(Medical evidences and their recording procedures).

رضامندی کا جائزہ اور اطلاعی رضامندی کے اصول 1.4.3

Razamandi ka Jayezah aur Ittilayi Razamandi ke Usool

(Overview of consent and rules of informed consent).

بیشہ طبابت پر عدالتی کاروائیوں کا اطلاق 1.4.4

Tababat par Itlaqui Adalati Karwayian

(Court procedures applicable to Medicolegal practices)

عدالت میں انصباط شہادت کا طریقہ 1.4.5

Adalat men Inzibate Shahadat ka Tareeqa

(Procedure of evidence recording in court).

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ماہر گواہ کے طور پر ایک طبیب کا کردار اور ذمہ داریاں 1.4.6
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Mahir gawah ke taur par ek Tabeeb ka Kirdar aur Zimmedariyan

(Roles and responsibilities of a doctor as expert witness).

References: 35,42,46,49,50,51,52,53,55,56,58,59,60,61,63,64,65,68,69,70,77,78,79,82,83,84,85							
3A	3В	3C	3D	3E	3F	3G	
CO 5	Describe the legal documents and various medical evidence, along with their recording procedures.	2	Lecture	СК	Knows- how	BS,L,L&GD,L&PPT	
CO 5	Demonstrate consent and its doctrine along with the rules of informed consent.	5	Practical1.2	CAP	Shows- how	DIS,IBL,SDL	
CO 5	Justify the roles and responsibilities of a Doctor as an expert witness.	6	Experiential- Learning1.3	CE	Shows- how	BS,DIS,FV,PAL,RLE	
CO 5	Prepare, present and preserve documentary evidence.	6	Experiential- Learning1.4	PSY- GUD	Does	BS,CBL,PBL,PrBL,SY	
CO 5	Demonstrate the function of the court with special reference to various inquiries and legal examinations by visiting the nearby court.	5	Experiential- Learning1.5	PSY- GUD	Shows- how	BS,FV,PAL	
Unit 5 متعلقد قواتين برات طبابت Muta'alliqa Qawaneen Bara'e Tababat (Acts Related to Medical Practice)							
1.5.1 Provisions of the following acts in Forensic Medicine:							
1.5.1.1 The Prenatal Diagnostic Techniques (PNDT) Act, 1994, and its amendments.							
1.5.1.2 The Transplantation of Human Organs Act, 1994.							
1.5.1.3 The Protection of Children from Sexual Offences (POCSO) Act 2004							
1.5.1.4 The Bhartiya Nyaya Sanhita, 2023							
1.5.1.5 Bhartiya Sakshya Adhiniyam, 2023							
1.5.1.6 Bhartiya Nagarik Suraksha Sanhita, 2023							
1.5.1.7 Provisions and relevance of the Clinical Establishment Act, 2010 applicable to AYUSH practitioners.							
References: 50,53,55,63,67,68,79,84,86,87,88,89,90,97							
3A	3В	3C	3D	3E	3F	3G	

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CO 5	Overview of the provisions related to Forensic Medicine in the following Acts in detail: 1. Bharatiya Nyaya Sanhita, 2023 2. Bharatiya Sakshya Adhiniyam, 2023 3. Bharatiya Nagarik Suraksha Sanhita, 2023	2	Lecture	сс	Knows- how	BS,L,L&GD,L&PPT
CO 5	Describe Bhartiya Nagarik Suraksha Sanhita and Bharatiya Nyaya Sanhita, 2023.	3	Practical1.3	CAN	Shows- how	DIS,SDL,SY
CO 5	Describe Bharatiya Sakshya Adhiniyam, 2023.	5	Experiential- Learning1.6	PSY- SET	Shows- how	BS,DIS,LS,PL,SY
CO 5	Describe the legal procedures of India.	3	Lecture	CAN	Knows- how	L,L&GD,L&PPT
CO 5	Elaborate on inquest, its types and importance.	3	Practical1.4	CAN	Shows- how	DIS,JC,SY
CO 5	Apply the provisions and relevance of the Clinical Establishment Act, 2010, applicable to AYUSH practitioners.	4	Experiential- Learning1.7	PSY- SET	Does	BL,DIS,IBL,RLE
CO 5	Describe the provisions of the Pre-Conception and Prenatal Diagnostic Techniques (PC-PNDT) Act, 1994 and its amendments.	3	Practical1.5	AFT- VAL	Shows- how	BS,D,PL,RP,SDL
CO 5	Describe the Transplantation of Human Organs Act, 1994.	3	Practical1.6	AFT- VAL	Shows- how	D,RP,SDL
CO 5	Describe the Protection of Children from Sexual Offences (POCSO) Act 2004.	3	Practical1.7	AFT- VAL	Shows- how	BS,L,LS,Mnt,RP,SDL
Unit 6 تغيرات كاذبه بعدالموت Taghayyurate Kaziba B'adal Maut(Post mortem artefacts)						

1.6.1 Artefacts Due to Post-mortem Changes.

1.6.2 Third Party Artefacts.

1.6.3 Environmental Artefacts.

1.6.4 Other Artefacts.

References: 37,43,44,53,63,64,65,67,68,69,71,79,80,82,83,84						
3A	3B	3C	3D	3E	3F	3G
CO 5	Identify artefacts due to Post-mortem Changes.	4	Practical1.8	PSY- SET	Shows- how	BS,DIS,PL,PER,TUT
یداضافات Unit 7	Tibbul Qanoon wa Ilmus Samoom mein Jadeed Izafat (Modern advances طب القانون وعلم السموم ميس جد	in Forensic I	Medicine and To	oxicology)		
1.7.1 Polygra	oh test and its procedure.					
1.7.2 Brain Fi	ngerprinting.					
1.7.3 Narco-A	nalysis test, its principles and procedure.					
References: 28,33,42,43,45,47,53,61,62,71,84						
3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the procedure of a Polygraph test and discuss its accuracy and acceptability in the court.	1	Lecture	СК	Knows- how	BL,EDU,L,L&PPT
CO 5	Describe the procedure, principles, uses, drawbacks and legal aspects of Brain Fingerprinting.	1	Lecture	сс	Knows- how	L,L&GD,L&PPT
CO 5	Explain Narco-Analysis, its principles and procedure.	3	Practical1.9	CE	Shows- how	BS,FC,PL,PER
CO 5	Prepare a report on the recorded videos of the Polygraph test, Brain Fingerprinting and Narco-Analysis.	5	Experiential- Learning1.8	AFT- RES	Does	BS,DIS,JC,PER
Practical Training Activity						
Practical 1.1 : Recording of Oral/documentary evidence.						
Total Learning Hours: 3 Hours						

Step-1: Creation of moot court scenario and description of the court procedure by the teacher: (45 Minutes)

1. The teacher will create a moot court scenario and describe the court procedure of recording Oral/documentary evidence.

Step-2: Recording of evidence: (1 Hour 30 Minutes)

- 2. The student will be directed to record the Oral/documentary evidence.
- 3. The student will examine the witness and record the statement.
- 4. Another student will cross-examine the witness.
- 5. The student will re-cross the witness

Step-3: Recording of the activity: (45 Minutes)

- 6. Geo-tagging Photographs will be taken, which will be pasted in the Practical record book.
- 7. The whole activity will be recorded in the record book

Practical 1.2 : Demonstration of consent and its doctrine.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

- 1. The teacher will describe the consent along with its doctrine and its rules in the lab.
- 2. The teacher will demonstrate the procedure for recording the consent of a student.
- 3. The student will discuss about the minute aspects of the topic with the teacher.

Step-2: Recording of Consent: (2 Hours)

- 4. The student will visit the OPD/IPD of the hospital
- 5. While attending OPD, the student will record the consent of the cases that came for Medico-legal examination and apply the rules of informed consent.

Step-3: Presentation of the activity: (1 Hour)

6. The student will be present in the class.

Step 4: Recording of the activity: (1 Hour)

7. The student will record the activity in the logbook.

Practical 1.3 : Bhartiya Nagarik Suraksha Sanhita and Bharatiya Nyaya Sanhita, 2023.

Total Learning Hours: 3 Hours

Step-1: Description and discussion on the Topic: (1 Hour)

1. The teacher will describe Bhartiya Nagarik Suraksha Sanhita and Bharatiya Nyaya Sanhita, 2023.

Step-2: Preparation & Presentation of digital content: (1 Hour 30 Minutes)

- 2. The student will understand various sections of BNS and prepare a PowerPoint presentation, keeping in view the key points.
- 3. The student will present any 5 sections of BNS 2023 in the class to the teacher.
- 4. The teacher will rectify as required.

Step 3: Recording of the Activity: (30 Minutes)

5. The case activity will be recorded in the logbook.

Practical 1.4 : Inquest, its types and importance.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (45 Minutes)

1. The teacher will discuss about the inquest, its types and importance in the lab.

Step-2: Preparation of digital content: (1 Hour 30 Minutes)

2. The student will understand and prepare a PowerPoint presentation or create digital content.

Step-3: Presentation and assessment of the content: (45 Minutes)

- 3. The student will present their content in the class or
- 4. The student may teach the topic to the UG students.

5. The teacher will assess the presentation and rectify if required.

Practical 1.5 : The Pre-Conception and Prenatal Diagnostic Techniques (PC-PNDT) Act, 1994 and its amendments.

Total Learning Hours: 3 Hours

Step-1: Description and discussion on the Topic: (30 Minutes)

- 1. The teacher will describe the Pre-Conception and Prenatal Diagnostic Techniques (PC-PNDT) Act, 1994 and its amendments in the lab.
- 2. The student will discuss key points about the Act.

Step-2: Preparation of Script: (1 Hour, 30 Minutes)

3. The student will prepare a script for the act.

Step-3: Presentation and assessment of the content: (30 Minutes)

- 4. The student will present the provisions of the Pre-Conception and Prenatal Diagnostic Techniques (PC-PNDT) Act, 1994 and its amendments in the lab in the form of a Role play in the class.
- 5. The teacher will rectify the presentation and clear any ambiguity, if any.

Step 4: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the activity book.

Practical 1.6 : The Transplantation of Human Organs Act, 1994.

Total Learning Hours: 3 Hours

Step-1: Description and discussion on the Topic: (30 Minutes)

- 1. The teacher will describe the Transplantation of Human Organs Act, 1994.
- 2. The student will discuss key points about the Act.

Step-2: Preparation of Script: (1 Hour 30 Minutes)

3. The student will prepare a script for the act.

Step-3: Presentation and assessment of the content: (30 Minutes)

- 4. The student will present the provisions of the Transplantation of Human Organs Act, 1994, in the form of a Role play in the class.
- 5. The teacher will rectify the presentation and clear any ambiguity, if any.

Step 4: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the activity book.

Practical 1.7 : The Protection of Children from Sexual Offences (POCSO) Act 2004.

Total Learning Hours: 3 Hours

Step-1: Description and discussion on the Topic: (30 Minutes)

- 1. The teacher will describe the Protection of Children from Sexual Offences (POCSO) Act 2004
- 2. The student will discuss key points about the Act.

Step-2: Preparation of Script: (1 Hour 30 Min)

3. The student will prepare a script for the act.

Step-3: Presentation and assessment of the content: (30 Minutes)

- 4. The student will present a few provisions of the POCSO Act in the form of a Role play in the class
- 5. The teacher will rectify the presentation and clear any ambiguity, if any.

Step 4: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the activity book.

Practical 1.8 : Artefacts due to Post-mortem Changes.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the Artefacts due to Post-mortem Changes, Third-Party Artefacts, and Environmental and other Artefacts.

Step-2: Preparation of digital content: (1 Hour 30 Minutes)

2. The student will understand and prepare a PowerPoint presentation or create digital content.

Step-3: Presentation and assessment of the content: (1 Hour)

- 3. The student will present their content in the class
- 4. The teacher will assess the presentation and rectify if required.

Step-4: Presentation and assessment of the content: 30 Minutes

5. The activity will be recorded in the record book.

Practical 1.9 : Narco-Analysis: principles and procedure.

Total Learning Hours: 3 Hours

Step-1: Description and discussion on the Topic: (30 Minutes)

1. The teacher will discuss the Narco-Analysis, its principles and procedures in the lab.

Step-2: Preparation of digital content: (1 Hour)

2. The student will understand and prepare a PowerPoint presentation or create digital content.

Step-3: Presentation and assessment of the content: (1 Hour)

- 3. The student will present their content in the class
- 4. The teacher will assess the presentation and rectify if required.
Step 4: Recording of the Activity: (30 Minutes)

5. The case activity will be recorded in the logbook.

Experiential learning Activity

Experiential-Learning 1.1 : Police station visit

Total Learning Hours: 4 Hours

Step-1: Pre-requisite: (1 Hour)

- 1. The student will study the administrative setup of the Police department along with their inquiry procedure.
- 2. The college authorities shall obtain prior intimation/permission from the nearby police station regarding the student's visit.

Step-2: Police Station Visit & Recording the activity: (3 Hours)

- 3. The student will visit the nearby police station to observe and record the following in the record book.
 - The whole procedure of recording the evidence
 - Inquiry procedure
 - Various sections of the police department.

Experiential-Learning 1.2 : Description of the importance of consent in the legal system.

Total Learning Hours: 4 Hours

Step-1: Preparation of script: (2 hours)

- 1. The teacher will distribute the topic and their respective roles.
- 2. The student will be asked to prepare the script for role-play
- 3. The teacher will rectify the script if required.

Step-2: Demonstration and recording of the Activity: (2 hours)

- 4. The Role play may be performed in front of all the teachers, and show the importance of consent in the legal system
- 5. The activity will be recorded in the record book.

Experiential-Learning 1.3 : Roles and responsibilities of a Doctor as an expert witness.

Total Learning Hours: 6 Hours

Step-1: Description of the activity: (1 Hour)

- 1. The teacher will describe the expert witness and discuss the roles and responsibilities of a doctor as an expert witness.
- 2. The student will also watch and observe the relevant videos.

Step-2: Court Visit: (4 Hours)

- 3. The student will visit the nearby court and observe the examination and cross-examination of a doctor.
- 4. The student will observe the attitude of the doctor and his reply submitted in response to the questions asked.

Step 3: Recording of the activity: (1 Hour)

5. The student will record the activity in the logbook

Experiential-Learning 1.4 : Documentary evidence.

Total Learning Hours: 6 Hours

Step-1: Description of the activity: (1 Hour)

- 1. The teacher will describe different types of evidence, especially documentary evidence.
- 2. Preparation of a medical certificate and a Medico-legal report will be discussed in the class.

Step-2: Preparation of Documentary Evidence: (3 Hours)

- 3. The student will be directed to prepare a mock medical certificate and Medico-legal reports of wounds.
- 4. The student will prepare a PowerPoint or digital content on the topic.
- 5. The teacher will guide in the preparation of reports and rectify if required

Step-3: Presentation of the activity: (1 Hour 30 Minutes)

- 6. The student will present their content in the class, or the student may be directed to teach it to the UG students.
- 7. The teacher will observe and assess the activity.

Step 4: Recording of the activity: (30 Minutes)

8. The activity will be recorded in the activity book.

Experiential-Learning 1.5 : Functioning of the court.

Total Learning Hours: 5 Hours

Step-1: Pre-requisite: (1 Hour)

- 1. The student will study the administrative setup of the Court along with their inquiry procedure.
- 2. The college authorities shall obtain prior intimation/permission from the nearby court regarding the student's visit.

Step-2: Field Visit & Recording of the activity: (4 Hours)

- 3. The student will visit the nearby police station to observe and record the following in the record book.
 - The whole procedure of recording the evidence
 - Examination in chief, cross-examination, leading question, etc.
 - All the activity will be recorded in the record book

Experiential-Learning 1.6 : Bharatiya Sakshya Adhiniyam, 2023.

Total Learning Hours: 5 Hours

Step-1: Description and discussion on the Topic: (1 Hour)

1. The student will study the Bharatiya Sakshya Adhiniyam, 2023.

Step-2: Preparation & Presentation of digital content: (3 Hours)

- 3. The student will understand various sections of BSA and prepare a PowerPoint presentation, keeping in view the key points.
- 4. The student will present any 5 sections of BSA 2023 in the class to the teacher.
- 5. The teacher will rectify as required.

Step 4: Recording of the Activity: (1 Hour)

6. The case activity will be recorded in the logbook.

Experiential-Learning 1.7 : Clinical Establishment Act, 2010, and its applicability to AYUSH practitioners.

Total Learning Hours: 4 Hours

Step-1: Learning of the Act: (1 Hour)

- 1. The student will study the Clinical Establishment Act, 2010, in detail and discuss it with the teacher.
- 2. Keeping in view the key points of the act, the student will prepare the key points to be noted during the visit to a clinical establishment.

Step-2: Hospital Visit: (2 Hours)

3. The student will visit the attached hospital and observe the infrastructure and resources in light of the act.

Step 3: Teacher's Review and Corrections (30 Minutes)

- 4. The outcomes will be discussed with the teacher,
- 5. The teacher will rectify this as required.

Step 4: Recording of the activity (30 Minutes)

6. The student will prepare a report and record the activity in the logbook.

Experiential-Learning 1.8 : Polygraph test, Brain Fingerprinting and Narco-Analysis.

Total learning Hours: 5 Hours

Step 1: Orientation & OPD Visit Preparation (30 Minutes)

1. The student will visit in OPD or a nearby hospital

Step 2: OPD/Hospital Visit & Case Identification (2 Hours)

2. The student will record at least one household and occupational poisoning case

Step 3: Case Presentation & Discussion (2 Hours)

3. The student will present the case under the guidance of a teacher

Step 4: Recording of the activity: (30 Minutes)

4. The case study will be recorded in a logbook

Modular Assessment	
Assessment method	Hour
Formative Assessment: 6 Hours	
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.	
1. Viva/short questions (30 marks):	
Viva will be conducted by the teacher, and 15 questions (2 marks each) covering all units will be asked.	6
Or	
3 short questions (5 marks each):	
The student will be given 3 short answer questions covering all units.	

2. Practical (30 Marks):

3 Practical from units 3, 4 & 5 for 10 Marks each

3. Experiential Learning Activity (15 Marks):

Demonstration of any one experiential learning activity from Units 6 or 7.

Or

Any practical in converted form can be taken for assessment (40 marks).

and

Any experiential portfolio/reflection/presentation can be taken as an assessment (35 marks).

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods		
Module 2 :	Tibbul Qanoon me Shanakht ki Ahmiyat (Significance of Ide طبالقانون میں شاخت کی ایمیت 	ntification in	Forensic Medici	ne)				
Module Lea (At the end	arning Objectives of the module, the students should be able to)							
1. De 2. Apj 3. De	 Describe various methods of identification. Apply the knowledge of forensic medicine in the identification of the living and the dead. Demonstrate various methods of identification. 							
ناخت Unit 1	Nasli, Mazhabi aur Jinsi Shanakht (Identification of race, religion ar السلى،مذہبی)ورجسی ش ^ا	nd sex)						
ت نىل 2.1.1	شاخب							
Shanakhte	Nasl							
(Identificati	on of Race)							
<i>مذ</i> ئب 2.1.2	شاخت							
Shanakhte	Mazhab							
(Identification of Religion)								
شاخت جنس 2.1.3								
Shanakhte	Shanakhte Jins							

(Identification of Sex).

3A	3B	3C	3D	3E	3F	3G		
CO 5	Discuss the Identification of Race, Religion and Sex.	4	Lecture	сс	Knows- how	BS,L,L&GD		
CO 5	Identify the Race, Religion and Sex of the cadaver available in the anatomy lab.	3	Practical2.1	CAN	Shows- how	DIS,L,L&PPT		
CO 5	Practice the identification of Race, Religion and Sex of a dead body available in the mortuary.	4	Experiential- Learning2.1	AFT-RES	Does	BL,BS,CD,CBL,SDL,TUT		
الشعر Unit 2	عبس ثووی دمیانی ادر کم Jinse Nouvi wa Mayani aur Ilme Sha'r (Nuclear sexing, Intersex and	d trichology)					
شاخت 2.2.1	جنس نوی و میانی کی							
Jinse Nau'	vi wa Mayani ki Shanakht							
(Identificat	ion of Nuclear sexing and Intersex).							
شان ت 2.2.2	مردہ ڈھانچہ سے جنس کی							
Murdah Dh	nanche se Jins ki Shanakht							
(Identificat	ion of sex from skeletal remains.)							
شاخ ت 2.2.3	بالوں کی مدد سے							
Balon ki ma	Balon ki madad se Shanakht							
(Identification with help of hair samples.)								
References: 22,23,24,28,31,32,33,34,35,36,37,38,39,40,41,44,52,53,62,68,69,70,71,72,75,76,78,79,82,83,86,95								
3A	3B	3C	3D	3E	3F	3G		

CO 5	Describe Nuclear sexing, Intersex and trichology.	3	Lecture	сс	Knows- how	L,L&PPT	
CO 5	Identify the sex from skeletal remains.	3	Practical2.2	PSY-SET	Shows- how	BS,D,PT	
کالعین Unit 3	کر'Umr ka Tayyun (Estimation of Age)						
) اہمیت 2.3.1	شاخت میں عمر کی						
Shanakht r	nen Umr ki Ahmiyat						
(Importanc	e of age in identification).						
کا تعین 2.3.2	تعظم سے عمر						
Ta'azzum s	se umr ka Ta'ayyun						
(Estimation	of Age from ossification of bones).						
كالغين 2.3.3	بالغول مين عمر						
Balighon m	ien umr ka Ta'ayyun						
(Determina	ition of age in adults).						
نى اہميت 2.3.4	تغین عمر کی طبی قانور						
Ta'ayyune	umr ki Tibbi Qanooni Ahmiyat						
(Medico-legal importance of estimation of age).							
References: 22,23,24,25,28,31,32,33,34,35,36,37,38,41,42,43,52,53,67,68,69,70,71,72,73,75,76,78,79,82,83,86,91,95							
3A	3B	3C	3D	3E	3F	3G	
CO 5	Describe Trichology.	4	Practical2.3	PSY- GUD	Shows- how	FC,PAL,PT	

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CO 5	Summarise the importance of handwriting, Speech, Voice, Tricks, Manner and Habit in identification.	4	Practical2.4	CE	Shows- how	DIS,PL				
CO 5	Practice miscellaneous methods of Identification.	4	Experiential- Learning2.2	AFT-RES	Does	BS,DIS,L&GD,RP				
ثانات Unit 4	مدوقامت،ندبهاوروتی، Qado Qamat, Nadba aur Washmi Nishanat (Stature, Scar and Tat	ttoo Marks)								
اہمیت 2.4.1	شاخت میں قدوقامت، وشمی نشانات اور ندبه کی اہمیت 2.4.1									
Importance	e of stature, scar and tattoo marks in identification.									
Reference	s: 22,23,24,28,31,32,33,34,35,36,37,38,39,40,44,52,53,62,68,69,70,71,72,73,	75,76,78,79	9,82,83,86,91,95	5						
3A	3B	3C	3D	3E	3F	3G				
CO 5	Illustrate the importance of stature, scar and tattoo marks in identification.	2	Lecture	СК	Knows- how	L,L&PPT ,TUT				
CO 5	Summarise different types of scars and tattoo marks and their importance in identification.	4	Practical2.5	CE	Shows- how	BS,D,PER,SDL				
CO 5	Describe stature, scar and tattoo marks and their medicolegal importance in the identification.	5	Experiential- Learning2.3	AFT-VAL	Does	BS,CD,CBL,SDL				
سامات Unit 5	Nishanate Angusht aur Tanzeere Masamat (Dactylography & Pol نثانات انتشره	roscopy								
نگاری 2.5.1	انگشت مینی/انگشت									
Angusht B	eeni/Angusht Nigari									
(Destulated										
(Dactylosc	(Dactyloscopy/dactylography).									
تنظير المسامات 2.5.2										
Tanzeerul Masamaat										
(Poroscopy	(Poroscopy).									

نشانات یا 2.5.3

Nishanate Pa

(Foot prints)

References: 22,23,24,32,33,34,35,36,37,38,39,40,41,44,52,53,62,65,67,69,70,71,72,73,75,76,78,79,80,81,82,83,91,95

3A	3В	3C	3D	3E	3F	3G
CO 5	Discuss Dactyloscopy/dactylography and Poroscopy.	2	Lecture	СК	Knows- how	BL,BS,EDU,L,L&GD,L&PPT ,TUT
CO 5	Prepare various types of fingerprints.	4	Practical2.6	PSY-SET	Shows- how	DIS,FC,L&PPT ,Mnt,TBL
CO 5	Demonstrate the importance of poroscopy in fingerprinting.	4	Practical2.7	PSY-SET	Shows- how	BL,BS,DIS,L&PPT ,Mnt,PAL
CO 5	Collect the fingerprints from various sites.	5	Experiential- Learning2.4	PSY- GUD	Does	BS,CD,DIS,PAL,PrBL
CO 5	Demonstrate different fingerprint developmental techniques.	4	Experiential- Learning2.5	PSY- GUD	Does	DIS,PAL,PrBL,TPW

Unit 6 مجتم پیانی اور تنظیر تیل یانشانات لب Jism paimayi aur Tanzeere Shiyl ya Nishanate lub (Anthropometory and Cheiloscopy)

جسم پیائی)برٹیلان سسٹم(2.6.1

Jism Paimayi (Bertilon's System)

(Anthropometory (Bartilons's system)

نشانات لب 2.6.2

Nishanate Lub

(Cheiloscopy)

References: 22,23,24,28,31,32,33,34,35,36,37,38,39,44,52,53,62,67,68,69,70,71,72,73,74,75,76,78,79,82,83,86,91,95

3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the medicolegal significance of Anthropometory (Bartilons's system), Cheiloscopy and Footprint.	4	Lecture	СК	Knows- how	BS,EDU,L,L&GD,L&PPT ,PAL,PL
CO 5	Demonstrate Cheiloscopy.	4	Practical2.8	PSY-SET	Shows- how	CBL,D,TUT
CO 5	Describe Palatoscopy/palatoprints/rugoscopy.	4	Experiential- Learning2.6	AFT-VAL	Does	BL,BS,DIS,TBL
CO 5	Describe rugoscopy and the Frontal sinus print.	4	Experiential- Learning2.7	AFT-VAL	Does	BS,D,ML,SDL
CO 5	Present Vascular grooves and sutural patterns.	5	Experiential- Learning2.8	AFT-RES	Does	BS,CD,PER,TUT
CO 5	Distinguish Ear print, Nose print, Nail print, EV method of identification, and 'Barium meal' X-ray of the stomach.	4	Experiential- Learning2.9	CAN	Does	BS,D,FC,PAL,SDL

Practical Training Activity

Practical 2.1 : Identification of Race, Religion and Sex.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the Identification of Race, Religion and Sex in the lab.

Step-2: Examination of the cadaver for its identification: (1 Hour, 30 Minutes)

- 2. The student will visit the anatomy lab of the college and observe the cadaver for its identification of religion, race and sex.
- 3. The student will record the activity in the practical record book. The teacher is expected to rectify as required.

Step 3: Recording of the activity: (30 Minutes)

4. The activity will be recorded in the practical record book.

Practical 2.2 : Identification of sex from skeletal remains.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will demonstrate the sex determination methods in the class.

Step-2: Examination of Pelvis and sex identification: (1 Hour, 30 Minutes)

- 2. The student will visit the anatomy lab of the college or a nearby medical college.
- 3. The student will collect a pelvis from the Bone Bank and discuss with the teacher of the Anatomy department regarding the differential points with respect to sex determination.
- 4. The student may also teach the UG students.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Practical 2.3 : Examination of Hair.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the hair and its differential features and give a few samples of hair, viz cotton fibre, animal hair and human hair.

Step-2: Microscopic examination of hair: (2 Hours, 30 Minutes)

- 2. The student will do the microscopic examination of the sample and identify whether:
 - a. The given sample is either hair or a cotton fibre.
 - b. If the sample is hair, then the hair belongs to a human or animal.
 - c. If the sample hair belongs to a human, then it belongs to which part of the body.

Step 3: Recording of the activity: (30 Minutes)

3. The activity will be recorded in the practical record book.

Practical 2.4 : Identification with Handwriting, Speech, Voice, Ticks, Manner and Habit

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the importance of Handwriting, Speech, Voice, Ticks, Manner and Habit in identification and assign a patient to the student to identify that person based on Handwriting, Speech, Voice, Ticks, Manner and Habit.

Step-2: Identification and demonstration of Fingerprints: (2 Hours 30 Minutes)

- 2. The student will examine the patient and record the key points with special reference to the Handwriting, Speech, Voice, Ticks, Manner and Habit.
- 3. The student will identify the person and record the findings in the logbook.
- 4. The student will prepare a PowerPoint presentation and present their findings in the class.
- 5. The student may also teach the topic to the UG students. The teacher may rectify, if required.

Step 3: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the practical record book

Practical 2.5 : Importance of Scar and Tattoo Marks in Identification.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the scar and tattoo marks and their importance in identification.

Step-2: Identification and demonstration of Fingerprints: (2 Hours 30 Minutes)

- 2. The student will visit the departmental lab and create artificial scars and tattoo marks on a model or the body of a colleague.
- 3. The student will explain different scars and tattoos and their medico-legal importance in identification. The student may also teach the topic to the UG students.
- 4. The teacher may rectify, if required.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Practical 2.6 : Preparation of various types of fingerprints.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the various types of fingerprinting.

Step-2: Collection and demonstration of Finger Prints: (2 Hours 30 Minutes)

- 2. The student will prepare fingerprints of himself and his colleagues in the practical record book and identify the pattern of each fingerprint.
- 3. The student will prepare a PowerPoint presentation showing the specific pattern helpful in the identification of the subject.
- 4. The student will present the medico-legal significance of each finger pattern.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Practical 2.7 : Poroscopy v/s Dactylography.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the colonoscopy and its medico-legal significance.

Step-2: Differential features: (2 Hours, 30 Minutes)

- 2. The student will observe the pores in the fingerprints prepared in the previous practical and try to identify the presence and pattern of the pores.
- 3. The student will prepare a PowerPoint presentation and present it in class.
- 4. The student may also teach the UG students or interns.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Practical 2.8 : Demonstration of Lip Prints.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will discuss the medico-legal importance of lip prints.

Step-2: Preparation of Lip Prints: (1 Hour)

2. The student will prepare his lip prints and also collect the lip prints of his colleagues.

Step-3: Presentation of the content: (1 Hour 30 Minutes)

3. The student will prepare his lip prints and also collect the lip prints of his colleagues and describe various differential features of the collected lip prints. The student will also explain the significance of each lip print.

Step 4: Recording of the activity: (30 Minutes)

4. The activity will be recorded in the practical record book.

Experiential learning Activity

Experiential-Learning 2.1 : Race, Religion and Sex of a dead body available in the mortuary.

Total Learning Hours: 4 Hours

Step-1: Description and discussion on the Topic: (1 Hour)

1. The teacher will discuss about the key points of identification of religion, race and sex.

Step-2: Mortuary Visit: (2 Hours 30 Minutes)

- 2. The student will visit the nearby mortuary and observe at least 2 cadavers for their identification of religion, race and sex based on key points discussed in the class.
- 3. The teacher is expected to rectify as required.

Step 3: Recording of the activity: (30 Minutes)

4. The student will record the activity in the practical record book.

Experiential-Learning 2.2 : Miscellaneous methods of Identification.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

- 1. The teacher will describe the importance of clothes and personal effects, and occupational marks in identification and create a mock scenario of a mass disaster.
- 2. The student will be directed to identify the bodies with the help of their clothes and personal effects, and occupational marks.

Step-2: Identification and demonstration of Fingerprints: (2 Hours 30 Minutes)

- 3. The student will examine the bodies and record the key points with special reference to the clothing, personal effects and occupational marks.
- 4. The student will identify the age, sex, religion and other possible features.
- 5. The student will prepare a PowerPoint presentation and present their findings in the class.
- 6. The student may also teach the topic to the UG students. The teacher may rectify, if required.

Step 3: Recording of the activity: (30 Minutes)

7. The activity will be recorded in the practical record book.

Experiential-Learning 2.3 : Case presentation on stature, scar and tattoo marks and their medicolegal importance.

Total Learning Hours: 5 Hours

Step-1: Assignment of cases for identification: (1 Hour)

1. The teacher will assign a minimum of 5 cases attending OPD for the identification of their stature and the presence of any scars and tattoo marks on the body

Step-2: Identification and demonstration of cases: (3 Hours 30 Minutes)

- 2. The student will examine the cases and identify them, keeping in view the key points of identification with special reference to stature and the presence of any scar and tattoo marks on the body.
- 3. The student will explain the topic to the interns and record the activity in the logbook.
- 4. The teacher will rectify this as required.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Experiential-Learning 2.4 : Collection of fingerprints from various sites.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the various methods of fingerprint collection.

Step-2: Collection and demonstration of Finger Prints: (3 Hours 30 Minutes)

- 2. The student will collect the fingerprints from any 4 of these, i.e. Door handle/Table/Chair handle/Glass or cup/Keypad mouse/Keyboard of the laptop or computer.
- 3. The student will develop those prints and demonstrate them in the class, or the student may practically teach the UG students.

Step 3: Recording of the activity: (30 Minutes)

4. The activity will be recorded in the practical record book.

Experiential-Learning 2.5 : Fingerprint developmental techniques.

Total Learning Hours: 4 Hours

Step-1: Study about the Topic: (1 Hour)

1. The student will study the different fingerprint developmental techniques and discuss them with the teacher.

Step-2: Forensic laboratory visit and Presentation in class: (2 Hours 30 Minutes)

- 2. The student will visit the nearby forensic laboratory and observe various fingerprint developmental techniques like DFO, Ninhydrin, powder, superglue fuming, and physical developers, and the student will learn how to use all these techniques.
- 3. The student will practically demonstrate these techniques in the class / UG students.

Step 3: Recording of the activity: (30 Minutes)

4. The activity will be recorded in the practical record book.

Experiential-Learning 2.6 : Palatoscopy/palatoprints/rugoscopy.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the Palatoscopy/palate prints..

Step-2: Preparation of digital content and its presentation: (1 Hour 30 Minutes)

- 2. The student will also go through all these methods by using ChatGPT/AI and other innovative tools.
- 3. Thereafter, the student will compile the information and prepare digital content, which shall be presented in the class. The teacher will rectify, if required.

Step-3: Examination of skull: (1 Hour)

4. The student will visit the emergency unit and anatomy lab and examine a skull. The student will observe the Palate found in it.

Step 4: Recording of the activity: (30 Minutes)

5. The student will record the activity in the practical record book.

Experiential-Learning 2.7 : Rugoscopy and Frontal sinus print.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the Rugoscopy and the frontal sinus print.

Step-2: Preparation of digital content and its presentation: (2 Hours)

- 2. The student will also go through all these methods by using ChatGPT/AI and other innovative tools.
- 3. Thereafter, the student will compile the information and prepare digital content, which shall be presented in the class. The teacher will rectify, if required.

Step-3: Examination of skull: (30 Minutes)

4. The student will visit the emergency unit and anatomy lab and examine a skull. The student will observe the Rugos and the frontal sinus found in it for its identification.

Step 4: Recording of the activity: (30 Minutes)

5. The student will record the activity in the practical record book.

Experiential-Learning 2.8 : Vascular grooves and sutural patterns.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the vascular grooves and sutural patterns.

Step-2: Preparation of digital content and its presentation: (2 Hours)

- 2. The student will also go through all these methods by using ChatGPT/AI and other innovative tools.
- 3. Thereafter, the student will compile the information and prepare digital content, which shall be presented in the class. The teacher will rectify, if required.

Step-3: Examination of skull: (1 Hour 30 Minutes)

4. The student will visit the anatomy lab and examine a skull. The student will diagnose the vascular grooves and sutural patterns of the skull.

Step 4: Recording of the activity: (30 Minutes)

5. The student will record the activity in the practical record book.

Experiential-Learning 2.9 : Ear print, Nose print, Nail print, EV method of identification, and 'Barium meal' X-ray of the stomach.

Total Learning Hours: 4 Hours

- Step-1: Description and discussion on the Topic: (1 Hour)
 - 1. The teacher will discuss the Ear print, Nose print, Nail print, EV method of identification, and 'Barium meal' X-ray of the stomach.

Step-2: Digital Learning: (1 Hour)

2. The student will learn all these methods by using ChatGPT/AI and other innovative tools.

Step-3: Preparation/digital content creation and its presentation: (1 Hour 30 Minutes)

- 3. The student will compile the information and prepare digital content.
- 4. The student will present it in the class.
- 5. The teacher will rectify this as required.

Step 4: Recording of the activity: (30 Minutes)

6. The student will record the activity in the practical record book.

Modular Assessment	
Assessment method	Hour
Formative Assessment: 6 Hours	
Instructions - Conduct a structured Modular assessment. Assessment will be for 75 marks. Keep a structured marking pattern. Use different as sessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.	6

Assessment will be done using the method mentioned in the Os. Marks distribution shall be as follows:

- 1. Viva (short questions) (15 Nos.) 2 Marks each (30 marks)- covering all units.
- 2. Practical (3 Nos.)—10 marks each (30 marks) from either of the units.
- 3. Experiential Learning Activity (1 No.)—15 Marks- from either of the units.

Or

Any practical in converted form can be taken for assessment. (40 Marks)

and

Any of the experiential, such as portfolios/reflections/presentations, can be taken as an assessment. (35 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods
سول : Module 3	Ilmus Samoom ke Mabadiyaat aur Bunyadi Usool (Basic P اعلم السموم کے مبادیات اور بنیاد کی ا	rinciples & Fu	ndamentals of	Foxicology ()	
Module Learn (At the end of	ing Objectives the module, the students should be able to)					
1. Descr 2. Demo	ibe the basic principles of toxicology. Instrate the classification of poisons.					
کے مبادیات Unit 1	العم المومــَـاllmus Samoom ke Mabadiyat (Basics of Toxicology)					
بنیادی اصول 3.1.1	علم الہموم کے :					
Ilmus Samoor	n ke Bunyadi Usool					
(Basic princip	les of Ilmul Samoom).					
م کا تعارف 3.1.2	علم السمو					
İlmus Samoor	n ka Ta'aruf					
(The introduct	ion of Ilmus Samoom).					
علم السموم کی ابتداء اور ارتقاء 3.1.3						
Ilmus Samoom ki Ibtida aur Irtiqa						
(Origin & deve	elopment of Ilmus Samoom).					

علم السموم کے مستقبل کے امکانات 3.1.4

Ilmus Samoom ke Mustaqbil ke Imkanaat

(Future prospects of Ilmus Samoom)

References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,37,38,42,43,61,71,72,84,85

3A	3В	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3	Describe the doctrine of Ilmul Samoom, historical perspective, its origin & development and prospects.	2	Lecture	СК	Knows- how	L,L&PPT
CO 5	Describe the journey of Ilmul Samoom.	5	Practical3.1	PSY- SET	Shows- how	BS,DIS,PER

Unit 2 موم کے طب القانونی پیلوادران کی درجہ بندی Samoom ke Tibbe Qanooni Pehlu aur unki Darjabandi (Medico-legal aspects and classification of Poisons)

سموم کی طب القانونی اہمیت 3.2.1

Samoom ki Tibbul Qanooni Ahmiyat

(Medico-legal aspects of Poisons).

Samoom ki Taqseem

(Classification of Poisons).

References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,38,42,43,61,62,71,72,84,85

3A	3В	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3	Describe the Aims, Objective & Scope of Ilmul Samoom.	2	Lecture	СК	Knows- how	DIS,FC,L,L&GD,L&PPT ,TPW
CO 5	Identify the challenges for a Forensic expert while dealing with the toxicological conditions.	5	Practical3.2	PSY- SET	Shows- how	BS,RP

CO 1,CO 2,CO 3	Discuss Medico-Legal Aspects of Poisons.	4	Experiential- Learning3.1	PSY- SET	Does	BS,D,SDL,TUT			
شخیص میت Unit 3	Tashkheese Sammiyat (Diagnosis of poisoning)								
زندوں میں زہرخورانی کی تشخیص 3.3.1									
Zindon men Z	Zindon men Zahrkhoorani Ki Tashkhees								
(Diagnosis of	poisoning in living).								
) کی تشخیص 3.3.2	مردوں میں زہرخورانی								
Murdon men Z	Zahrkhoorani ki Tashkhees								
(Diagnosis of	poisoning in the dead).								
ر میں ناکامی 3.3.3	انکثاف زم								
Inkeshafe Zah	r men Nakami								
(Failure to det	ect poison).								
References: 1	,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,38,42,43,53,61,84,85	i							
3A	3B	3C	3D	3E	3F	3G			
CO 1,CO 2,CO 3	Describe Samoom and Tasammum	3	Lecture	ск	Knows- how	BL,BS,DIS,L,L&GD,L&PPT ,TUT			
CO 1,CO 2,CO 3	Justify the concept of Tasammum of Unani medicine and correlate it with modern concepts.	5	Practical3.3	CE	Shows- how	BS,PL,PER,SDL,TBL			
CO 5	Diagnose of poisoning in the Living.	5	Experiential- Learning3.2	PSY- SET	Does	BS,CBL,DIS,PER,RP			
CO 1,CO 2,CO 3	Demonstrate the diagnosis of poisoning in the dead.	5	Experiential- Learning3.3	PSY- SET	Does	BS,CBL,D,DIS,PAL			
CO 1,CO	Specify the duties of a Unani physician in a case of suspected poisoning.	3	Experiential-	AFT-	Does	BS,RP,SDL			

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2,CO 3			Learning3.4	SET			
Unit 4 سمياني درجديندى Sammiyati Darjabandi (Toxicological Classification)							
مروم کے درجات 3.4.1							
Samoom ke Darajaat							
(Categories of	f poisons).						
References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,38,42,43,53,61,62,66,67,68,69,70,71,72,73,75,76,77,78,79,82,83,84,85,95							
3A	3В	3C	3D	3E	3F	3G	
CO 5	Describe the broad categories of Poisons.	3	Lecture	СК	Knows- how	DIS,FC,L,L&GD,L&PPT ,SY	
CO 1,CO 2,CO 3	Prepare wet specimens of plant poison.	5	Practical3.4	PSY- GUD	Shows- how	BS,TBL,W	
CO 1,CO 2,CO 3	Identify the plant poisons available in the nearby locality.	5	Experiential- Learning3.5	PSY- SET	Does	BS,D,FV	
CO 1,CO 2,CO 3	Describe the reasons for the failure to detect poison.	4	Experiential- Learning3.6	PSY- SET	Does	BS,CBL,D,PAL	

Practical Training Activity

Practical 3.1 : Journey of Ilmul Samoom.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The teacher will discuss the history of Ilmus Samoom with the students.

Step-2: Literature review (2 Hours)

2. The student will perform a vast literature review on the history of Ilmul Samoom and prepare a review paper and/or digital content on it.

Step-3: Presentation: (1 Hour)

- 3. The student will present their content in the class.
- 4. The teacher will rectify as required.

Step 4: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Practical 3.2 : Challenges faced while dealing with toxicological conditions.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The teacher will discuss the role of a Forensic Expert while dealing with the toxicological conditions.

Step-2: Understanding and presentation of the topic: (3 hours)

- 2. The student will understand the topic and prepare a script.
- 3. The student will play the role of a forensic expert and deal with a moot toxicological condition.
- 4. The student will try to present the problems faced by a forensic expert while dealing with toxicological conditions like difficulty in diagnosis and management of poisoning, following the provisions of various acts, etc.

Step 3: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Practical 3.3 : Unani Concept of Tasammum and its correlation with the modern concept.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The teacher will describe the concept of *Tasammum* in Unani medicine and correlate it with modern concepts.

Step-2: Preparation of the report: (2 hours)

2. The student will understand the concept and prepare a comprehensive report.

Step-3: Presentation of the report: (1 Hour)

- 3. The student will present the report in class.
- 4. The teacher will rectify, if required.

Step 4: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Practical 3.4 : Preparation of wet specimens of plant poisons.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The teacher will describe the procedure for the preparation of wet specimens of a poisonous plant.

Step-2: Field visit and Collection and preservation of toxic plants: (3 Hours)

- 2. The student will visit the herbal garden or any nearby nursery.
- 3. The student will identify a minimum of 3 plants having toxicological properties
- 4. The student will collect the specimen, including its toxic part, and preserve it in a jar dipped in a suitable medium under the guidance of the pharmacognosy/saidla department teacher.
- 5. The student will prepare a label and paste it on the specimen. The specimen will be preserved in the lab for future reference

Step 3: Recording of the activity: (1 Hour)

6. The activity will be recorded in the record book.

Experiential learning Activity

Experiential-Learning 3.1 : Medico-Legal Aspects of Poisons.

Total Learning Hours: 4 Hours

Step-1: Discussion on Medico-legal Aspects of Poisons: (1 Hour)

1. The student will study the Medico-Legal Aspects of Poisons.

Step-2: Preparation of Digital Content: (1 Hour, 30 Minutes)

2. The student will prepare a PowerPoint presentation or create digital content in which all the sections of IPC and punishment related to the toxic substance, with special reference to the Narcotic Drugs and Psychotropic Substances Act, 1985, will be explained.

Step-3: Presentation/UG teaching: (1 Hour)

- 3. The student will teach the topic to the UG students in the presence of the teacher.
- 4. The teacher will rectify, if required.

Step 4: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the practical record book.

Experiential-Learning 3.2 : Diagnosis of a case of poisoning in Living.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

- 1. The student will study different types of poisoning in detail.
- 2. The student will discuss the diagnosis of poisoning in living with a guide or teacher.

Step-2: Preparation of the script: (2 Hours)

3. The student will prepare a script on the diagnosis of poisoning in Living.

Step-3: Role play: (1 Hour)

4. The student will play a role in the demonstration of the diagnosis of poisoning.

Step 3: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Experiential-Learning 3.3 : Diagnosis of poisoning in the dead.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

- 1. The student will study different types of poisoning in detail.
- 2. The student will discuss the diagnosis of poisoning in the dead with a guide or teacher.

Step-2: Preparation of the script: (2 Hours 30 Minutes)

3. The student will prepare a script on the diagnosis of poisoning in the dead.

Step-3: Role play: (1 Hour)

4. The student will play a role in the demonstration of the diagnosis of poisoning.

Step 3: Recording of the activity: (30 Minutes)

5. The activity will be recorded in the record book.

Experiential-Learning 3.4 : Duties of a Unani physician in a case of suspected poisoning.

Total Learning Hours: 3 Hours

Step-1: Discussion on the topic: (30 Minutes)

1. The student will study the Duties of a Unani physician in a Case of Suspected Poisoning and discuss with the teacher.

Step-2: Presentation/Role play: (2 Hours)

2. The student will perform a role play to demonstrate such duties and present the same in the class.

Step 3: Recording of the activity: (30 Minutes)

3. The activity will be recorded in the practical record book.

Experiential-Learning 3.5 : Identification and collection of plant poisons available in the nearby locality.

Total Learning Hours: 5 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The student will study about the plant poisons and discuss with the teacher.

Step-2: Visit the nearby area for the identification and collection of poisonous plants: (3 hours)

2. The student will visit the nearby area and identify the plant poisons.

Step-3: Preparation of Herbarium and its presentation: (1 Hour)

- 3. The student will collect the specimen and prepare its herbarium.
- 4. The student will prepare a PowerPoint presentation or create digital content on these plants and will present it to the class.
- 5. The teacher will rectify this if required.

Experiential-Learning 3.6 : Failure to detect poison.

Total Learning Hours: 4 Hours

Step-1: Discussion on the topic: (1 Hour)

1. The student will study certain conditions in which the poison cannot be detected in the body and discuss with the teacher.

Step-2: Observance of the suspected cases of poisoning: (2 hours, 30 Minutes)

- 2. The student will observe all the cases of suspected poisoning attending the OPD to which the universal antidote has been prescribed, and their reports for the poison are negative.
- 3. The student will discuss those cases with the teacher and mention the probable reasons for the non-detection of poison.

Step 3: Recording of the activity: (30 Minutes)

3. The activity will be recorded in the practical record book.

Modular Assessment						
Asses	sment method	Hour				
Forma	tive Assessment: 4 Hours					
Instructions - Conduct a structured Modular assessment. The assessment will be for 50 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.						
1.	Viva (20 marks):					
	Viva will be conducted by the teacher, and 10 questions (2 marks each) covering all units will be asked.					
2.	Short Answer Questions (10 marks):	4				
	The student will be given 2 Short Answer Questions from 1, 2 and 4 units for 5 marks each.					
3.	Case-Based Scenario (20 Marks):					
	Demonstration of any one case from unit 3.					
Or						

Any practical in converted form can be taken for assessment (25 marks). &

Any of the experiential as portfolio/reflections/presentations, can be taken as an assessment (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods
ول : Module 4	llaje Sammiyat ke Bunyadi Usool (Basics of Management of poisc والعلان سميت کے بنیادی اصر	oning)				
Module Learn	ning Objectives					
(At the end of	the module, the students should be able to)					
1. Desc	ribe the basic principles of management of poisoning.					
3. Desc	ribe the laws related to poisons and poisoning.					
Unit 1 اعلاج سمیت کےعمومی اصول llaje Sammiyat ke Umoomi Usool (General principles of management of poisoning)						
علاج سمیت کے عمومی اصول 4.1.1						
Ilaje Sammiyat ke Umoomi Usool						
(General principles and management of poisoning).						
تریاقات کے مبادیات اور ان کا استعال 4.1.2						
Tiryaqat ke Mabadiyat aur unka Istemal						
(Basics of Tiryaqat and their use).						

References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,38,40,42,43,44,53,61,62,66,67,68,69,70,71,72,73,75,76,78,79,82,83,84,85,86,95						
3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the general principles of management of poisoning.	5	Lecture	CE	Knows- how	BL,L,L&PPT
CO 1,CO 2,CO 3	Discuss the general use of Tiryaqat available in Classical Unani Literature.	5	Practical4.1	CE	Shows- how	BS,DIS,FC,TBL
CO 5	Apply the knowledge of the use of Tiryaqaat in the management of poisoning mentioned in the classical Unani literature.	5	Practical4.2	PSY- GUD	Shows- how	BL,BS,DIS,LRI,Mnt,PAL
CO 1,CO 2,CO 3	Prepare Tiryaq from the mufrad drug available in classical Unani Literature.	4	Experiential- Learning4.1	PSY- GUD	Does	DIS,PAL,PBL
CO 1,CO 2,CO 3	Prepare Murakkab Tiryaq from the drugs available in classical Unani Literature.	4	Experiential- Learning4.2	PSY- GUD	Does	DIS,PAL,PBL,TPW
CO 1,CO 2,CO 3	Prepare a case report on the diagnosis and management of poisoning.	5	Experiential- Learning4.3	PSY- GUD	Does	CD,CBL,RLE,SDL
تتانی قوانین Unit 2	Samoom wa Tasammum se Mutalliq Hindustani Qawaneen (Lawsسومو تمم مستغلق بندور	related to l	Poison and Poiso	ning in India	a)	
4.2.1 Overview of the following acts related to poison and poisoning in India:						
4.2.1.1 The Poison Act 1919						
4.2.1.2 The Drugs and Cosmetics Act, 1940						
4.2.1.3 The Drugs and Cosmetics Rules, 1945						
4.2.1.4 The Pharmacy Act 1948						
4.2.1.5 The Drug Control Act, 1950						
4.2.1.6 The Drug and Magic Remedies (Objectionable Advertisement) Act, 1954						
4.2.1.7 The Prevention of Food Adulteration Act 1954						
1						

4.2.1.8 The Medicinal and Toilet preparation (Excise Duty) Act, 1955

4.2.1.9 The Food Safety and Standards Act 2006.

References: 22,26,55,56,57,58,59,60,63,64,65,66,77,80,84

3A	3B	3C	3D	3E	3F	3G
CO 5	 Overview of the following Acts in detail: Poison Act 1919 Drugs and Cosmetics Act, 1940 & The Drugs and Cosmetics Rules, 1945 Pharmacy Act 1948 Drug Control Act, 1950 The Drug and Magic Remedies (Objectionable Advertisement) Act, 1954 Prevention of Food Adulteration Act 1954 Preparation (Excise Duty) Act and Rules, 1955 The Food Safety and Standards Act 2006 	5	Lecture	CAN	Knows- how	L,L&PPT ,LS,TUT
CO 5	Discuss the Drugs and Cosmetics Act, 1940, rules and their amendments.	5	Practical4.3	ск	Shows- how	BS,DIS,FC
CO 5	Discuss the Narcotic Drugs and Psychotropic Substances Act, 1985 and rules made under it and their amendments	5	Practical4.4	CAN	Shows- how	BL,DIS,RLE,SDL
CO 5	Demonstrate the relevant provision of the Drugs and Cosmetics Act, 1940.	5	Experiential- Learning4.4	PSY- GUD	Does	BL,BS,DIS,TBL
CO 5	Identify misleading advertisements (MLA) & Adverse Drug Reaction (ADR)	4	Experiential- Learning4.5	PSY- GUD	Does	BS,D,PAL,TPW,TBL
CO 5	Participate in the tadabeer e musaffa of toxic drugs.	4	Experiential- Learning4.6	AFT-VAL	Does	BL,DL,IBL,Mnt,PAL

Practical Training Activity

Practical 4.1 : General use of Tiryaqat is available in Classical Unani Literature.

Total Learning Hours: 5 Hours

Step-1: Discussion on general use of Tiryaqat: (1 Hour)

1. The teacher will describe various sources of general use, Tiryaqat.

Step-2: Critical analysis of the database on the general use of Tiryaqat (2 hours)

2. The student will visit the library and the available online databases related to Unani literature.

Step-3: Compilation and presentation (1 Hour)

- 3. The student will compile, interpret and present the data.
- 4. The teacher may suggest modifications if required in the data compiled.

Step 4: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Practical 4.2 : Case reports mentioned in classical Unani literature.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will discuss the sources of use of Tiryaqaat in the management of poisoning mentioned in classical Unani literature with students.

Step-2: Preparation of the content: (2 hours)

- 2. The student will visit the library and the available online databases related to the case studies mentioned in classical Unani literature.
- 3. The student will compile, interpret and present the data.

Step-3: Presentation of the content: (1 Hour)
4. The teacher may suggest modifications if required in the data compiled.

Step 4: Recording of the activity: (1 Hour)

5. The activity will be recorded in the record book.

Practical 4.3 : Drugs and Cosmetics Act, 1940, rules and their amendments.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will describe the Drugs and Cosmetics Act, 1940, the rules made under it and their amendments.

Step-2: Observance of the functionality of the in-house pharmacy: (1 Hour, 30 Minutes)

- 2. The student will visit the in-house pharmacy of the college
- 3. The student will observe the functionality of the pharmacy in light of the act.

Step-3: Preparation of report and its presentation: (2 Hours)

- 4. The student will prepare a report and present it in class
- 5. The teacher will discuss the missing points of the report.

Step 3: Recording of the activity: (30 Min.)

6. The case will be recorded in the Logbook.

Practical 4.4 : Narcotic Drugs and Psychotropic Substances Act, 1985.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will describe the Narcotic Drugs and Psychotropic Substances Act 1985, the rules made therein and their amendments

Step-2: Observance of the functionality of a Medical store: (2 hours)

- 2. The student will visit a nearby Medical Store.
- 3. The student will observe the functionality of the store in light of the act.

Step-3: Preparation of report and its presentation: (2 hours)

- 4. The student will prepare a report and present it in class
- 5. The teacher will discuss the missing points of the report.

Step 4: Recording of the activity: (30 Min.)

6. The activity will be recorded in the Logbook.

Experiential learning Activity

Experiential-Learning 4.1 : Preparation of Tiryaq from mufrad drug.

Total Learning Hours: 4 Hours

Step-1: Selection of single drug antidote and study about its preparation: (1 Hour)

1. The teacher will help students choose a single drug antidote and its method of preparation in detail.

Step-2: Preparation of single drug antidote: (2 Hours)

- 2. The student will prepare the single drug antidote.
- 3. The teacher will monitor the progress of preparation.
- 4. The student will share the findings with the teacher or guide.
- 5. The prepared antidote will be displayed in the museum.

Step 3: Recording of the activity: (1 Hour)

6. The activity will be recorded in the record book.

Experiential-Learning 4.2 : Preparation of Murakkab Tiryaq.

Total Learning Hours: 4 Hours

Step-1: Selection of compound drug antidote and study about its preparation: (1 Hour)

1. The teacher will help students choose a compound drug antidote and its method of preparation in detail.

Step-2: Preparation of compound drug antidote: (2 Hours 30 Minutes)

- 2. The student will prepare the compound drug antidote.
- 3. The teacher will monitor the progress of preparation.
- 4. The student will share the findings with the teacher or guide.
- 5. The prepared antidote will be displayed in the museum.

Step 3: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the record book.

Experiential-Learning 4.3 : Diagnosis and management of poisoning.

Total Learning Hours: 5 Hours

Step-1: Assignment of the case of poisoning and its diagnosis: (1 Hour)

- 1. The teacher will select a case of poisoning in the OPD
- 2. The student is expected to diagnose the case

Step-2: Management of the case: (2 Hours, 30 Minutes)

- 3. Prepare its Usoole Ilaj
- 4. Prepare the specific antidote (Mufrad/Murakkab)
- 5. Manage the case.

Step-3: Clinical Presentation of the case: (1 Hour)

- 6. The student will present the case before the teacher and other students.
- Step 3: Recording of the activity: (30 Minutes)
 - 7. The case will be recorded in the Logbook.

Experiential-Learning 4.4 : The Drugs and Cosmetics Act, 1940.

Total Learning Hours: 5 Hours

Step-1: Study of various provisions of The Drugs and Cosmetics Act, 1940: (2 hours)

1. The student will study the various provisions of The Drugs and Cosmetics Act, 1940 and discuss with the teacher.

Step-2: Creation of a Mock situation related to pharmacovigilance: (2 Hours 30 Minutes)

- 2. The teacher will create a Mock situation related to pharmacovigilance.
- 3. The student will apply the relevant provision of The Drugs and Cosmetics Act, 1940, in that mock situation and extract the outcome.

Step 3: Recording of the activity: (30 Min.)

4. The activity will be recorded in the Logbook.

Experiential-Learning 4.5 : Misleading Advertisement and ADR Reporting.

Total Learning Hours: 4 Hours

Step-1: Screening of misleading advertisement (MLA) and reporting of Adverse Drug Reaction (ADR) : (3 hours)

- 1. The student will examine various newspapers/websites/social media platforms and observe a minimum of 5 advertisements of Unani/Ayurvedic drug manufacturers, consultants/doctors/practitioners and report at least one ADR from the OPDs/IPDs.
- 2. The student will critically analyse the advertisement (and differentiate the misleading ones) and the ADR form.
- 3. The student will discuss about the content of the advertisement with the teacher and discuss

Step-2: Presentation of the content: (1 Hour)

- 4. The student will prepare a PowerPoint presentation and present the MLA and ADR in class through PowerPoint.
- 5. The teacher will amend as required.
- 6. The same shall be reported through proper channels in coordination with the nearby Peripheral Pharmacovigilance Centre/ institutional Pharmacovigilance Cell.

Experiential-Learning 4.6 : The detoxification process of toxic drugs.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student will study the processing of toxic drugs for the purification of Class IV Toxic drugs.

Step-2: Processing of Toxic Drugs: (3 Hours)

- 2. The student will visit the Saidla department of the college and observe how the toxic drugs (Class IV) are purified in the pharmacy.
- 3. The student will observe the processing of a minimum of 5 drugs and record the process in the logbook.
- 4. The student will prepare a PowerPoint presentation and present it in class.
- 5. The teacher will rectify this as required.

Step 3: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the Logbook.

Modular Assessment	
Assessment method	Hour
Formative Assessment: 4 Hours	
Instructions - Conduct a structured Modular assessment. The assessment will be for 50 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.	4
1. Class Teaching (10 Marks):	

The student will be assessed through the class teaching of any topic from Unit 1.

2. Practical (10 marks):

The student will be given one practical from Unit 1.

3. Case report (30 Marks):

Presentation on any 3 laws; 10 Marks each from Unit 2.

Or

Presentation of 3 cases of Misleading Advertisements.

Or

Any practical in converted form can be taken for assessment (25 Marks). &

Any of the experiential as portfolio/reflections/presentations, can be taken as an assessment (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods		
Module 5 :	Tibbul Qanoon men Sherakati Uloom ke Mabadiyat ka طب القانون مين شرائتى علوم كرمباديات كالطلاق	Itlaq (Applica	ation of Basics of	f allied scier	nces in fore	ensic Medicine)-Part-I		
Module Lea (At the end 1. De 2. Ide	Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the applied anatomy of different organs & tissues relevant for forensic medicine.							
3. Me 4. Dis	edico-legal importance of physiology. scuss different radiological procedures, i.e., X-ray and CT scan, for the solution of mo	edico-legal p	roblems.					
ىائيات Unit 1	Itlaqi Tashreehe Qanooni aur Shuaiyate (Applied Forensic Anatomy aاطلاقی تشرت کانونی اورشع	nd Radiolog	y)					
5.1.1 Surfa	ace landmarks & regional anatomy of medico-legal significance							
5.1.2 Com	parative anatomical study of Male & Female skeletons.							
5.1.3 Anato	omy of the neck with special reference to violent asphyxial deaths.							
5.1.4 Anato	omy of reproductive organs.							
5.1.5 Gross	s anatomy of heart and coronaries.							
5.1.6 Outlir	ne of embryonic/fetal development.							
5.1.7 Micro	5.1.7 Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, and skin)							
5.1.8 Unde	erstand different radiological procedures, i.e. X-ray, CT scan, for the solution of med	ico-legal prol	blems.					

Reference	s: 22,23,24,40,41,44,45,47,52,56,58,84,86,94								
3A	3В	3C	3D	3E	3F	3G			
CO 5	Describe the Outline of embryonic/foetal development.	2	Lecture	сс	Knows- how	L,L&PPT			
CO 5	Describe the Microscopic anatomy /histology of different organs & tissues, such as the brain, heart, lungs, liver, kidneys, thyroid, bone, and skin.	2	Lecture	сс	Knows- how	L,L&PPT			
CO 5	Describe the Applied Anatomy of the Male & Female skeleton and their reproductive organs.	3	Practical5.1	сс	Shows- how	BS,D-M,PAL			
CO 5	Demonstrate the use of X-ray, USG, and CT scan in medico-legal cases.	4	Practical5.2	PSY-SET	Shows- how	BS,Mnt,PAL,X-Ray			
CO 5	Identify the Surface landmarks of medico-legal significance.	3	Experiential- Learning5.1	CE	Does	BS,D,D-M,PAL			
CO 5	Identify the regional anatomy of medico-legal significance.	3	Experiential- Learning5.2	сс	Does	BS,PSM,SDL			
CO 5	Demonstrate the Gross anatomy of the heart and coronary arteries.	3	Experiential- Learning5.3	PSY- GUD	Does	BS,D,DIS,PAL,PrBL			
CO 5	Demonstrate the gross anatomy of the lungs and brain.	2	Experiential- Learning5.4	PSY- GUD	Does	BL,BS,D,DIS,TUT			
Unit 2 الطلاق منافع الاعضاقالونى Itlaqi Munafeul Aaza Qanooni (Applied Forensic Physiology)									
5.2.1 Overview of Physiology of menstruation & pregnancy.									
5.2.2 Over	5.2.2 Overview of Physiology of Thermo-regulation.								

5.2.3 Homeostasis, Blood grouping & Rh system

5.2.4 Medico-legal aspects of allergy and anaphylaxis.

5.2.5 The gross applied physiology of forensic importance of Circulatory, Respiratory, Hemopoietic, Nervous, Digestive, Endocrine, Excretory, Uro-genital, Musculoskeletal System.

Reference	s : 22,23,24,40,41,42,43,47,79,81,84					
3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the Physiology of menstruation & pregnancy.	2	Lecture	СК	Knows- how	BS,DIS,L,L&GD,L&PPT ,L_VC,PAL,TUT
CO 5	Describe the Physiology of thermo-regulation.	2	Lecture	СК	Knows- how	BS,DIS,L,L&GD,L&PPT ,L_VC,LS,PAL
CO 5	Demonstrate the Blood grouping & Rh system with its medical-legal importance.	5	Practical5.3	PSY- GUD	Shows- how	BS,D,DL,PER
CO 5	Discuss the correlation between Homeostasis and the concept of Akhlat, with medicolegal importance.	4	Practical5.4	PSY-SET	Shows- how	BS,D,D-M,DIS,FC,PAL
CO 5	Describe the medico-legal aspects of allergy and anaphylaxis.	4	Practical5.5	AFT-VAL	Shows- how	BS,D,PL,PER,SDL
CO 5	Demonstrate the gross applied physiology of forensic importance of Circulatory, Respiration and Haemopoietic Systems.	2	Experiential- Learning5.5	PSY- GUD	Does	BS,D,D-BED,DIS,L&PPT ,L_VC
CO 5	Demonstrate the gross applied physiology of forensic importance of the Nervous, Digestive and Endocrine Systems.	3	Experiential- Learning5.6	PSY- GUD	Does	BS,D,DIS,PAL,PER,TUT
CO 5	Demonstrate the gross applied physiology and forensic importance of the Excretory, Urogenital and Musculoskeletal Systems.	3	Experiential- Learning5.7	PSY- GUD	Does	BS,D,PER,TUT
تانونى Unit 3	الطلاقىعلم الاستان Itlaqi Ilmul Asnan Qanooni (Applied Forensic Dentistry)			·		·
5.3.1 Intro	duction of oral anatomy, morphology and its characteristics.					
5.3.2 The o	development & wear patterns of teeth.					
5.3.3 The r	elevance of forensic dentistry in identifying human remains, age, sex and race.					
Poforonoo	• 22 23 24 22 40 41 42 44 47 71 72 94					
34	3R	30	3D	3F	3F	36
	Departies the Oral anotomy merchology characteristics, and development 9 was				Knowe	
CO 5	patterns of teeth and discuss their relevance in the identification of human	2	Lecture	CE	how	BL,D-M,L,L&GD,L&PPT

	remains, estimation of age, determination of sex and race.					
CO 5	Demonstrate Dental radiography (X-rays), Dental impression & morphology analysis.	2	Experiential- Learning5.8	PSY-SET	Does	BL,BS,FC,L,L&PPT ,PAL,TUT
CO 5	Demonstrate the collection of dental evidence and analysis.	2	Experiential- Learning5.9	PSY- GUD	Does	D,DL,D-M
CO 5	Estimate the age of skeletal remains through the anthropometric study of teeth.	3	Experiential- Learning5.10	CE	Does	BS,CBL,D,TUT

Practical Training Activity

Practical 5.1 : Applied anatomy of the Male & Female skeleton and their reproductive organs.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student will visit the anatomy lab of the college, and the teacher will explain the Applied Anatomy of the Male & Female skeleton and their reproductive organs

Step-2: Differentiation of Male & Female skeletons: (1 Hour, 30 Minutes)

- 2. The student will observe the skeleton models and reproductive organs of the male and female
- 3. The student will discuss with the faculty of the Anatomy department about the differential features of Male & Female skeletons and discuss about the applied anatomy of male and female reproductive organs.

Step 3: Recording of the activity: (30 Min.)

4. The activity will be recorded in the Logbook.

 $\label{eq:practical 5.2} \ensuremath{\text{Practical 5.2}}: \ensuremath{\text{Demonstration of the use of X-ray, USG, and CT scan in medico-legal cases.}$

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will explain the significance of X-ray, USG, and CT scan for the solution of medico-legal problems, and assign 2 X-ray films, 2 USG reports and 1 CT scan

report. Having medicolegal importance, the IPD patients are admitted to the attached hospital.

Step-2: Examination of X-ray films, USG reports, and CT scan reports: (1 Hour)

2. The student will examine those X-ray films, USG reports, and CT scan reports.

Step-3: Presentation of the reports: (1 Hour 30 Min.)

- 3. The student will prepare a PowerPoint presentation about the importance of the above X-ray films, the USG reports, and the CT scan reports.
- 4. The student will be present in the class or teaching UG students.
- 5. The teacher will rectify as required.

Step 4: Recording of the activity: (30 Min.)

6. The activity will be recorded in the Logbook.

Practical 5.3 : Blood grouping & Rh system, with its medical-legal importance.

Total Learning Hours: 5 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will explain the Blood Grouping and the Rh system.

Step-2: Digital content creation and its presentation: (3 Hours, 30 Minutes)

- 2. The student will visit the physiology lab of the college
- 3. The student will do the blood grouping and Rh antigen detection with the help of a lab. Technician or departmental faculty.
- 4. The student will describe the medical importance to the UG students.
- 5. The teacher will observe the activity and rectify as required.

Step 3: Recording of the activity: (30 Min.)

6. The activity will be recorded in the practical file

Practical 5.4 : Correlation between Homeostasis and the concept of Akhlat.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will explain homeostasis and its correlation with the concept of *Akhlat*.

Step-2: Digital content creation and its presentation: (2 Hours 30 Minutes)

- 2. The student will visit the physiology lab and discuss homeostasis with the faculty of the physiology department.
- 3. Then, students will visit the Kulliyat Department and discuss the concept of akhlat with the faculty of the Kulliyat Department.
- 4. The student will compile a consolidated PowerPoint presentation or digital content correlating both concepts.
- 5. The student will present in the class in front of the teacher.
- 6. The teacher will rectify as required and guide in terms of their medico-legal importance.
- 7. The student will teach the concept to the UG students.

Step 3: Recording of the activity: (30 Min.)

8. The activity will be recorded in the practical file.

Practical 5.5 : Medico-legal aspects of allergy and anaphylaxis.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will discuss the concept of allergy, anaphylaxis and the Unani concept of zakawate hiss.

Step-2: Digital content creation and its presentation: (2 Hours 30 Minutes)

- 2. The student will visit the physiology lab and discuss the concept of allergy and anaphylaxis with the faculty of the physiology department.
- 3. Then, students will visit the Kulliyat Department and discuss the Unani concept of zakawate hiss with the faculty of the Kulliyat Department.
- 4. The student will compile a consolidated PowerPoint presentation or digital content correlating both concepts.
- 5. The student will present in the class in front of the teacher.
- 6. The teacher will rectify as required, and their medico-legal importance.
- 7. The student will teach the concept to the UG students.

Step 3: Recording of the activity: (30 Min.)

8. The activity will be recorded in the practical file.

Experiential learning Activity

Experiential-Learning 5.1 : Surface anatomy of the human body of medico-legal significance.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student will study the surface anatomy of the human body.

Step-2: Demonstration of the anatomy of surface anatomy of the human body: (1 Hour 30 Minutes)

- 2. The student will visit the anatomy lab and discuss with the anatomy teacher the Surface landmarks of medico-legal significance.
- 3. The student will observe the Surface landmarks on the models or cadavers in the anatomy lab.
- 4. The student will draw the surface landmarks on the cadaver and document them.

Step 3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the Logbook.

Experiential-Learning 5.2 : Regional anatomy of medico-legal significance.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student is expected to study the regional anatomy of the human body.

Step-2: Demonstration of the regional anatomy of the human body: (1 Hour 30 Minutes)

2. The student will visit the anatomy lab and discuss with the anatomy teacher the regional anatomy of medico-legal significance.

- 3. The student will observe the various regions of the body on the models or cadavers in the anatomy lab.
- 4. The activity will be recorded in the logbook.
- Step 3: Recording of the activity: (30 Min.)
 - 5. The activity will be recorded in the Logbook.

Experiential-Learning 5.3 : Gross anatomy of the heart and coronary arteries.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student will study the gross anatomy of the heart and coronary arteries, their functions, and major pathological changes responsible for death.

Step-2: Demonstration of anatomy of the heart and coronary arteries: (1 Hour, 30 Minutes)

- 2. The student will visit the anatomy lab and observe the gross anatomy of the heart with the help of models or dissection in a cadaver.
- 3. The student demonstrates the topic to UG students.

Step 3: Recording of the activity: (30 Min.)

4. The activity will be recorded in the Logbook.

Experiential-Learning 5.4 : Gross anatomy of lungs and brain of forensic significance.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student is expected to study the gross anatomy of the lungs, the brain and their major pathological changes responsible for death.

Step-2: Demonstration of the anatomy of lungs: (1 Hour)

- 2. The student will visit the anatomy lab and observe the gross anatomy of the lungs and brain, with the help of models or dissection of a cadaver.
- 3. The student demonstrates the topic to UG students.

4. The activity will be recorded in a logbook.

Experiential-Learning 5.5 : Gross applied physiology of forensic importance of Circulatory, Respiratory and Haemopoietic Systems.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student will study the gross applied physiology of the forensic importance of the Circulatory, Respiratory and Haemopoietic Systems.

Step-2: Visit to Physiology Lab and discussion with the faculty: (1 Hour)

- 2. The student will visit the physiology lab and discuss these systems with the faculty of the physiology department.
- 3. The student will also demonstrate on the patients in IPD, or the student may present in the class in front of the teacher.
- 4. The teacher will rectify this as required.
- 5. The student will demonstrate the systems to the UG students.

Step 3: Recording of the activity: (30 Minutes)

6. The activity will be recorded in the practical file.

Experiential-Learning 5.6 : Gross applied physiology of forensic importance of Nervous, Digestive and Endocrine Systems.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student will study the gross applied physiology of the forensic importance of the Nervous, Digestive and Endocrine Systems

Step-2: Visit to Physiology Lab and discussion with the faculty: (1 Hour 30 Min.)

- 2. The student will visit the physiology lab and discuss these systems with the faculty of the physiology department.
- 3. The student will also demonstrate on the patients in IPD, or the student may present in the class in front of the teacher.
- 4. The teacher will rectify this as required.
- 5. The student will demonstrate the systems to the UG students.

Step 3: Recording of the activity: (30 Min.)

6. The activity will be recorded in the practical file.

Experiential-Learning 5.7 : Gross applied physiology of forensic importance of Excretory, Urogenital and Musculoskeletal Systems.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student will study the gross applied physiology of the forensic importance of the Excretory, Urogenital and Musculoskeletal System.

Step-2: Visit to Physiology Lab and discussion with the faculty: (1 Hour)

- 2. The student will visit the physiology lab and discuss these systems with the faculty of the physiology department.
- 3. The student will also demonstrate on the patients in IPD or the student may present in the class in front of the teacher.
- 4. The teacher will rectify this as required.
- 5. The student will demonstrate the systems to the UG students.

Step 3: Recording of the activity: (30 Min.)

6. The activity will be recorded in the practical file.

Experiential-Learning 5.8 : Dental radiography (X-rays), Dental impression analysis and Dental morphology analysis.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student will study the Dental radiography (X-rays), Dental impression analysis and Dental morphology analysis.

Step-1: Dental X-Ray Examination: (1 Hour)

- 2. The student will visit the Dental Unit of the hospital and discuss these topics with the dentist available in the Dental Unit of the Hospital.
- 3. The Dentist will give one Dental X-ray to the student and explain its key features to the student. During the discussion, the dentist will focus on the dental morphology.

4. The student will compile the findings of the Dental X-ray and interpret dental impressions, keeping in view the morphology of teeth.

Step 3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 5.9 : Collection of dental evidence and analysis.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Min.)

- 1. The teacher will demonstrate the collection of dental impressions on moulding clay.
- 2. The student will study the dental impressions of the bite marks by using moulding clay as the model.

Step-2: Evaluation of bite mark: (1 Hour)

- 3. The student will evaluate the bite marks on the moulding clay and demonstrate the dental evidence, its collection and analysis.
- 4. The activity will be recorded in the logbook.
- 5. The teacher will rectify this as required.

Step 3: Recording of the activity: (30 Min.)

6. The activity will be recorded in the practical file.

Experiential-Learning 5.10 : Estimation of the age of skeletal remains through anthropometric study of teeth.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (30 Min.)

1. The student will study the anthropometry of teeth and discuss it with the teacher.

Step-2: Age estimation: (2 hours)

2. The student will visit the anatomy lab and bring a sample of the mandible.

3. The student will identify the age of the person to whom the mandible may belong based on the anthropometric study of teeth.

4. The teacher will rectify what is required.

Step 3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Modular Assessm	ent	
Assessment meth	od land land land land land land land lan	Hour
Formative Assess	nent: 4 Hours	
Instructions - Con different assessm point as per Table	duct a structured Modular assessment. The assessment will be for 50 marks for this module. Keep a structured marking pattern. Use ant methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade 6C.	
1. Viva/shor	questions (20 marks):	
Viva will be	conducted by the teacher, and 10 questions (2 marks each) covering all units will be asked.	
Or		
2 short qu	estions (10 marks each):	4
The stude	nt may be given 2 short answer questions from any 2 units.	
2. Open Boo	k Test (15 Marks)	
3 questio	s of 5 Marks each (1 from each Unit).	
3. Practical	15 marks):	
The stude	nt will be given any one practical from any Unit.	

Or

Any practical in converted form can be taken for assessment (25 Marks). &

Any of the experiential as portfolio/reflections/presentations, can be taken as an assessment (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods			
Module 6 :	Tibbul Qanoon me Sherakati Uloom ke Mabadiyat ka Itl طب القانون مين شرائق علوم کے مبادیات کااطلاق	aq (Applicat	ion of Basics of a	allied sciend	es in forer	sic Medicine)-Part-II			
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the pathology of forensic importance. 2. Illustrate evidence from the elements obtained from the human body. 3. Identify the insects of forensic importance.									
تانونى Unit 1	الطلاقىعمالامراغر المراغر								
6.1.1 Pathology of cell/tissues—Degenerative changes & secondary changes, atrophy, hypotrophy, aplasia, hyperplasia, ischemia, necrosis, infarction, cloudy swelling, amyloidosis and embolism, asphyxial deaths, electricity, gunshot wounds, poisoning, thrombo-embolism, fat embolism, aspirations, wound healing, histological determination of time of death.									
6.1.2 Body	's local and systemic response to trauma.								
6.1.3 Heali	ng and fibrosis (Pathology of scar)								
6.1.4 Com	mon general and systemic diseases caused by physical/chemical agents.								
6.1.5 Disor	6.1.5 Disorders of infancy and old age changes relevant to forensic medicine.								
6.1.6 Patho	6.1.6 Pathology-Gross and Microscopic—in myocardial infarction, congenital heart diseases, tuberculosis, cirrhosis, malnutrition, and starvation.								
References	s: 22,23,24,40,42,65,70,71,72,84								
3A	3B	3C	3D	3E	3F	3G			

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CO 5	Discuss the gross and microscopic Pathology of Myocardial infarction and Congenital heart diseases.	2	Lecture	CE	Knows- how	L,L&PPT
CO 5	Describe the gross Pathology of tuberculosis and its relationship with Malnutrition.	1	Lecture	CE	Knows- how	L,L&PPT
CO 5	Analyse gross Pathology in Cirrhosis and Starvation.	1	Lecture	CAN	Knows- how	L,L&PPT ,TUT
CO 5	Evaluate the Body's local & systemic response to trauma, and Healing & fibrosis (Pathology of scar).	2	Practical6.1	CE	Shows- how	BS,D,DIS,PAL,SDL,TBL
CO 5	Discuss common pathological conditions caused by physical and chemical agents.	2	Practical6.2	сс	Shows- how	D,DIS,PAL,TUT
CO 5	Identify the forensic pathology in human remains.	3	Experiential- Learning6.1	PSY- GUD	Does	BL,BS,D,PAL
CO 5	Identify the pathological changes of forensic significance of wounds.	3	Experiential- Learning6.2	PSY- GUD	Does	BS,CD,CBL
CO 5	Identify the responsibility of a forensic expert in a mass disaster.	3	Experiential- Learning6.3	AFT-RES	Does	BS,CD,DIS,PAL
CO 5	Describe the pathological changes related to infancy and old age and their forensic relevance.	2	Experiential- Learning6.4	CE	Does	BS,CD,CBL,PL,SDL
يقانونى Unit 2	الطلاقى كيمياء يوباtlaqi Kimyaye Haiwiya Qanooni (Applied Forensic Biochemistry)الطلاقى كيمياء يوب					
6.2.1 Forer	nsic biochemistry of saliva, Semen, Sweat, CSF.					
6.2.2 Proce	edure of collection of body fluids from a dead body.					
623 Polo	of biochomistry in invostigating the scone of crime					
0.2.3 1016	or biochemistry in investigating the scene of clime.					
6.2.4 DNA	as evidence.					
References	s: 40,42,43,71,72,76,82,83,84					
3A	3B	3C	3D	3E	3F	3G
CO 5	Describe the forensic biochemistry of Saliva and Semen.	2	Lecture	СК	Knows-	BL,BS,L,L&GD,L&PPT

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					how	,L_VC,LS,PAL		
CO 5	Describe the Procedure for the collection of body fluids.	2	Practical6.3	сс	Shows- how	L&GD,L&PPT		
CO 5	Apply the knowledge of biochemistry in crime scene investigation.	2	Practical6.4	CAN	Shows- how	DL,DIS		
CO 5	Describe the forensic biochemistry of Sweat and CSF.	1	Lecture	СК	Knows- how	BS,DIS,L,L&GD,L&PPT ,L_VC		
CO 5	Discuss the blood/semen stain at a crime scene.	2	Practical6.5	PSY- GUD	Shows- how	BS,DIS,PAL		
CO 5	Discuss the importance of trace evidence at the crime scene.	4	Experiential- Learning6.5	AFT-RES	Does	BL,BS,D,DIS,JC,TUT		
CO 5	Estimation of post-mortem interval from different enzymes produced in the body after death.	3	Experiential- Learning6.6	САР	Does	C_L,D,DIS		
CO 5	Describe the significance of DNA profiling.	3	Experiential- Learning6.7	CE	Does	BS,D,DIS,PAL,TUT		
CO 5	Demonstrate the forensic importance of hair at a crime scene.	3	Practical6.6	AFT-RES	Shows- how	BS,DIS,PAL		
CO 5	Examine the sweat/saliva/milk/sputum stains at a crime scene.	3	Practical6.7	PSY-SET	Shows- how	BS,DL,DIS,PL		
قانونی Unit 3	tlaqi Khurdhayatyat wa ilmul Hashrat Qanooni (Applied Forensic الطلاقى خورد حياتيات وعلم الحشرات	Microbiolog	y and Entomolog	іу)				
6.3.1 Micro	biology of Proteobacteria, Firmicutes related to Cadavers.							
6.3.2 Micro	biology of Bacteroidetes and Actinobacteria related to Cadavers.							
6.3.3 Prepa	aration and demonstration of the slides after taking secretions from a dead body and i	dentification	of microorganis	ms.				
6.3.4 Detai	6.3.4 Details of flies (Diptera) and beetles (Coleoptera).							
6.3.5 Forei	nsic importance of flies (Diptera) and beetles (Coleoptera) to determine the time of de	ath.						

6.3.6 Factors responsible for the evolution of insects and arthropods in a cadaver.

6.3.7 The role of insects found in a dead body to determine Post Mortem Interval (PMI).

References: 71,72,76,84,94

3A	3В	3C	3D	3E	3F	3G
CO 5	Describe the microbiology of Proteobacteria, Firmicutes, Bacteroidetes and Actinobacteria related to Cadavers.	1	Lecture	сс	Knows- how	BL,BS,L,L&GD,L&PPT ,TUT
CO 5	 Describe flies (Diptera) and beetles (Coleoptera) and their forensic importance to determine the time elapsed from death. Discuss the factors responsible for the evolution of insects and arthropods in a cadaver. 	2	Lecture	сс	Knows- how	BL,BS
CO 5	Identify the microbes of Forensic importance.	2	Practical6.8	PSY-SET	Shows- how	BL,BS,DL,PAL
CO 5	Prepare the slides from the secretions of a dead body and identify the microbes.	2	Practical6.9	PSY-SET	Shows- how	BL,D,PAL,PT
CO 5	Demonstrate the microorganisms of forensic importance.	2	Experiential- Learning6.8	AFT-VAL	Does	BS,D,DL,PAL,SDL,SIM
CO 5	Measure the Post Mortem Interval (PMI) by the demonstration of insects found in a dead body.	3	Experiential- Learning6.9	PSY- GUD	Does	BS

Practical Training Activity

Practical 6.1 : Pathology of scar.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will describe the Body's local and systemic response to trauma and Healing & fibrosis.

Step-2: Visit to the Pathology Lab: (30 Minutes)

2. The student will visit the pathology department and observe the models, charts, and other materials available related to the topic and discuss the content with the faculty of the department of pathology.

Step-3: Preparation of the content: (30 Minutes)

3. The student will prepare a PowerPoint presentation or create digital content showing the Body's local & systemic response to trauma, and Healing & fibrosis

Step-4: Presentation of the content: (30 Minutes)

- 4. The student will present the topic in the class, or the student may teach UG students.
- 5. The teacher will observe and rectify, and suggest the changes if required.

Practical 6.2 : Common pathological conditions due to physical and chemical agents.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will describe the common pathological conditions caused by physical and chemical agents.

Step-2: Visit to the Pathology Lab: (30 Minutes)

- 1. The student will visit the pathology lab and discuss with the faculty of the pathology department about the above conditions.
- 2. The student will observe the models and the specimens available in the lab

Step-3: Preparation of the content: (30 Minutes)

3. The student will prepare a PowerPoint/create digital content.

Step-4: Presentation of the content: (30 Minutes)

- 4. The student will present the case in the class, and the teacher will rectify the content as required.
- 5. The student may also teach UG students, if required.

Practical 6.3 : Collection of body fluids.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will explain and demonstrate the Procedure for the collection of body fluids and assign a case to the student.

Step-2: Preparation of the content: (1 hour)

- 2. The student will collect the body fluids under the guidance of the teacher.
- 3. The teacher will observe and rectify as needed.

Practical 6.4 : Use of biochemistry in crime.scene investigation.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will describe various biochemical methods needed to investigate the scene of the crime.

Step-2: Visit to the Central Laboratory: (30 Minutes)

- 2. The student will visit the central laboratory of the hospital and observe various machines and chemicals used for biochemical analysis.
- 3. The laboratory staff is expected to explain the handling of various machines and the importance of chemicals used in biochemical examination.

Step-3: Preparation of the content: (30 Minutes)

4. The student will record all the details and compile a PPT

Step-4: Presentation of the content: (30 Minutes)

- 5. The student will present a PowerPoint presentation in the departmental seminar.
- 6. The teacher will evaluate and rectify as needed.

Practical 6.5 : Examination of blood/semen stain at a crime scene.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will discuss the forensic significance of blood/semen stains in crime scene investigation.

Step-2: Visit to the Pathology/Biochemistry lab: (1 hour)

2. The student will visit the pathology/biochemistry lab of the college and try to identify the blood/semen stains available at the lab platform.

Step-3: Preparation of the content: (30 Minutes)

- 3. The student will record the activity in the practical record book.
- 4. The teacher will evaluate and rectify as needed.

Practical 6.6 : Forensic importance of hair at a crime scene.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour 30 Minutes)

- 1. The teacher will explain the forensic importance of hair and create a mock crime scene.
- 2. The student will collect the hair sample from the crime scene.

Step-2: Examination of the content: (1 Hour)

3. The student will examine the hair microscopically and try to identify whether the sample hair belongs to a human/animal, or male/female.

Step-3: Recording of the content: (30 Minutes)

4. The student will record the activity in the practical record book.

Practical 6.7 : Examination of sweat/saliva/milk/sputum stains at a crime scene.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will explain the biological stains like sweat/saliva/milk/sputum stain, and their forensic significance in crime scene investigation.

Step-2: Visit to Pathology/Biochemistry lab: (1 Hour 30 Minutes)

2. The student will visit the pathology/biochemistry lab of the college and try to identify the biological stains available at the lab platform; these stains are of sweat/saliva/milk/sputum

Step-3: Recording of the content: (30 Minutes)

- 3. The student will record the activity in the practical record book.
- 4. The teacher will evaluate and rectify as needed.

Practical 6.8 : Demonstration of microbes of Forensic importance.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (1 Hour)

1. The teacher will discuss the Forensic importance of microbes through microscopic slides

Step-2: Visit to the Microbiology Lab: (30 Minutes)

2. The student will visit the microbiology lab of the college and observe various microscopic slides and try to identify the microbes of forensic importance.

Step-3: Recording of the content: (30 Minutes)

3. The activity will be recorded in the practical record book.

Practical 6.9 : Identification of microbes in the secretions of a dead body.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The teacher will explain the method of preparing a slide from the secretions of a dead body and identify the microbes.

Step-2: Visit to the Mortuary: (1 Hour)

- 2. The student will visit the mortuary and collect the sample from the cadaver.
- 3. The student will prepare the slides and observe the microbes present in them.
- 4. The microbiologist will assist the student in identifying the microbes.

Step-3: Recording of the content: (30 Minutes)

5. The activity will be recorded in the practical record book.

Experiential learning Activity

Experiential-Learning 6.1 : Significance of forensic pathology in the identification of human remains.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student is expected to study the principles of forensic pathology and their application in detail.

Step-2: Visit to the Anatomy Dept.: (45 Minutes)

2. The student will visit the anatomy department of the college and observe the available cadaver.

Step-3: Application of the content and Suggestion: (45 Minutes)

- 3. The student will apply the basic knowledge of forensic pathology and try to identify whether the human remains had any pathology or not.
- 4. The teacher will observe, suggest and evaluate the observations.

Step-4: Recording of the content (30 Minutes)

5. The activity will be recorded in a logbook.

Experiential-Learning 6.2 : Identification of the pathological changes of forensic significance of wounds.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (45 Minutes)

1. The student is expected to study the pathology of wounds and mechanical and regional injuries.

Step-2: Visit to the Casualty Department: (1 Hour 30 Minutes)

- 2. The student will visit the casualty department of the college or a nearby hospital.
- 3. The student will try to identify the pathological changes of wounds, and mechanical and regional injuries in the cases attending the casualty.

Step-3: Preparation of the Case Records: (45 Minutes)

- 4. The student will prepare at least five case records of the injuries.
- 5. The teacher will evaluate and suggest.

Experiential-Learning 6.3 : Responsibility of a forensic expert in a mass disaster.

Total Learning Hours: 3 Hours

Step-1: Explanation of the Topic: (1 Hour)

1. The teacher will explain the role of a forensic expert in disaster and direct the student to visit the site of mass fatality/disaster (if any) or create a mock scene of mass disaster.

Step-2: Examination and Identification: (1 Hour)

- 2. The student will :
 - Examine the scene of the disaster.
 - Identify the victims.
 - Identify the cause of death and assist in the reconstruction of the cause of the disaster.

Step-3: Preparation of the Report: (30 Minutes)

- 3. The student will prepare a report.
- 4. The teacher will evaluate the report and suggest modifications as required.

Step-4: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 6.4 : Pathological changes related to infancy and old age and their forensic relevance.

Total Learning Hours: 2 Hours

Step-1: Explanation of the Topic: (30 Minutes)

- 1. The student is expected to study the senile changes in a dead body relevant to forensic medicine.
- 2. The student will discuss the changes with the teacher.

Step-2: Visit to the Paediatric and Geriatric OPD: (30 Minutes)

- 3. The student will attend the paediatric and Geriatric OPD of the attached hospital or visit the nearby mortuary and observe a minimum of 2 cases of infancy and senile age each.
- 4. The student will observe the senile changes in the cases.

Step-3: Preparation of the Records: (30 Minutes)

- 5. The student records the pathological changes of forensic importance.
- 6. The student will prepare the record

Step-4: Presentation of the content: (30 Minutes)

- 7. present the content in pictorial form.
- 8. The teacher will evaluate and suggest.

Experiential-Learning 6.5 : Importance of trace evidence at the crime scene.

Total Learning Hours: 4 Hours

Step-1: Description of the Topic: (1 Hour)

1. The student is expected to visit a mock crime scene of the crime and collect the evidence from trace elements, like hair and biological stains of blood, semen, sweat, saliva, milk, and sputum.

Step-2: Discussion of the Topic: (1 Hour 30 Minutes)

2. The student will discuss the importance of trace elements like hair and biological stains of blood, semen, sweat, saliva, milk, and sputum with the teacher.

Step-3: Presentation of the Topic: (1 Hour)

- 3. The student is expected to present the observations of the crime scene.
- 4. The teacher will evaluate and suggest.

Step-4: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 6.6 : Estimation of post-mortem interval from different enzymes produced in the body after death.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (30 minutes)

1. The student is expected to illustrate the significance of different enzymes produced in the body after death in the Estimation of post-mortem interval.

Step-2: Visit to Mortuary: (1 Hour)

2. The student will visit the mortuary and collect samples of trace elements.

Step-3: Examination and Interpretation of the Topic: (30 minutes)

- 3. The student will examine the trace elements for the presence of various enzymes.
- 4. The student will interpret the time since death from the presence of enzymes

Step-4: Presentation of the Topic: (30 Minutes)

- 5. The student will present a PowerPoint presentation in the departmental seminar.
- 6. The teacher will evaluate and rectify as needed.

Step-4: Recording of the activity: (30 Min.)

7. The activity will be recorded in the practical file.

Experiential-Learning 6.7 : Significance of DNA profiling.

Total Learning Hours: 3 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student is expected to study DNA profiling and its role as evidence.

Step-2: Visit to the Forensic Laboratory: (45 Minutes)

2. The student will visit the nearby forensic laboratory and observe DNA profiling.

Step-3: Preparation of the content: (30 Min.)

- 3. The student will record the activity in the logbook.
- 4. The student will prepare a PowerPoint.

Step-4: Presentation of the content: (45 Minutes)

- 5. The student will present the PPT in the class.
- 6. The teacher will rectify, evaluate and suggest as required.

Step-5: Recording of the activity: (30 Min.)

7. The activity will be recorded in the practical file.

Experiential-Learning 6.8 : Demonstration of microorganisms of forensic importance.

Total Learning Hours: 2 Hours

Step-1: Description of the Topic: (30 Minutes)

1. The student is expected to study the microorganisms of forensic importance.

Step-2: Visit to the Forensic Laboratory: (1 Hour)

- 2. The student will visit the forensic laboratory.
- 3. The student will discuss with the microbiologist about the topic.
- 2. The microbiologist will assist the student in the preparation of a case study about the demonstration of microorganisms of forensic importance.

Step-3: Presentation of the content: (30 Minutes)

- 4. The student will present it in class.
- 5. The teacher will rectify if required.

Experiential-Learning 6.9 : Determination of Post Mortem Interval (PMI)

Total Learning Hours: 3 Hours

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Step-1: Description of the Topic: (1 Hour)
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1. The student is expected to illustrate the significance of different insects in the estimation of the post-mortem interval.

Step-2: Visit to the Mortuary : (1 Hour)

2. The student may visit the mortuary and collect samples of insects from the dead body, or collect a sample from any stray animal's mutilated body.

Step-3: Examination of the content: (30 Minutes)

3. The student will examine the presence of various insects.

4. The student will interpret the time since death from the presence of insects.

Step-4: Recording of the content: (30 Minutes)

- 5. The results will be recorded in the logbook.
- 6. The teacher will rectify, evaluate and suggest as required.

Modula	ar Assessment				
Assess	ment method	Hour			
Format	ive Assessment: 4 Hours				
Instruc assess Table 6	Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.				
1.	Viva (10 marks):				
	Viva will be conducted by the teacher, and 5 questions (2 marks each) covering all units will be asked.				
2.	Short Answer Questions (20 marks):				
	The student will be given 4 Short Answer Questions (5 marks each) covering all units.	4			
3.	Practical (20 marks):				
	The student will be given any 2 practicals (10 marks each) from any 2 units.				
Or					
Any practical in converted form can be taken for assessment (25 marks). &					
Any of	the experiential as portfolio/reflections/presentations, can be taken as an assessment (25 Marks)				

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods
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Module 7 : يبيشدواران سلوك وآداب اورطبى وتحقيقاني اخلاقيات Peshawarana Sulook wa Aadab aur Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics)

Module Learning Objectives (At the end of the module, the students should be able to)

- 1. Demonstrate the nobility of the medical profession.
- 2. Describe the Unani as well as the modern concept of Professional Conduct & Medical Etiquette.
- 3. Illustrate the Unani as well as the modern concept of research ethics and various codes of conduct.

Unit 1 بن اخلاقيات Tibbi Akhlaqiyat (Medical Ethics)

طبی اخلاقیات اور طب یونانی میں اخلاقیات 7.1.1

Tibbi Akhalqiyaat aur Tibbe Unani men Akhlaqiyaat

(Medical Ethics and ethics in Unani Medicine)

طبی اخلاقیات کی اہمیت اور پیشہ طبابت کی عظمت و شرافت 7.1.2

Tibbi Akhlaqiyaat ki ahmiyat aur Pesha-e-tababat ki Azmat wa Sharafat

(Importance of medical ethics, Greatness and nobility of medical profession)

اخلاقی ضوابط 7.1.3

Akhlaqi Zawabit

(Ethical codes)

ضابطه حموراني 7.1.3.1

Zabta e Hammurabi.

(The codes of Hammurabi)

معاہدہ بقراطیہ پانچویں صدی 7.1.3.2

C Panchveen Sadee

(Hippocratic oath 5th century)

معاہدہ بقراطیہ)اردو ترجمہ 7.1.3.3

Moahida e Buqratiya (urdu Turjuma)

Hippocratic Oath (Urdu translation)

ضابطہ نورمبرگ - 1948 7.1.3.4

Zabta e Nuremberg 1948

(Nuremberg code 1948)

جنيوا اعلانيه-1948 7.1.3.5

Geneva Elaniyah-1948

(Declaration of Geneva- 1948)

حقوق انسانی کا عالمگیر اعلانیہ-1948 7.1.3.6

Haqooqe Insani ka Alamgeer Elaniyah-1948
(Universal declaration of human rights- 1948)

ہکستگی اعلانیہ - 1964 7.1.3.7

Hesinki Elaniyah-1964

(Helsinki declaration 1964)

طبی اخلاقیات کا بین الاقوامی ضائطہ 7.1.3.8

Tibbi Akhlaqiyaat ka bainul Aqwami zabtah

(International code of medical ethics)

روداد بلمانت 7.1.3.9

Rudade Belmont

(Belmont report)

7.1.3.10 Indian medical council (professional conduct, Etiquettes and ethics) regulations 2002

7.1.3.11 Ethical codes for the physicians as constituted by the Central Council for Indian System of Medicine (CCIM)/National Commission for Indian System of Medicine (NCISM)

7.1.4 Medical ethics about organ transplantation, biomedical human research and experimentation, human rights, cloning, genetic engineering, human genome, citizens' charter and International codes of medical ethics.

7.1.5 Ethics about artificial insemination, abortion, antenatal sex, foetus, genetics and euthanasia.

اخلاقیات صحت عامه 7.1.6

Akhlaqiyate Sehate Ammah

(Public health ethics.)

References: 2,6,8,11,17,56,57,58,63,65,84							
3A	3В	3C	3D	3E	3F	3G	
CO 5	Discuss the Medical ethics, its greatness and nobility as per Unani concepts.	1	Lecture	CE	Knows- how	BS,L,L&GD,L&PPT	
CO 5	Discuss the International code of medical ethics.	2	Lecture	САР	Knows- how	DIS,PAL,PL,PER	
CO 5	Endorse the ethical practices adopted by Unani physicians.	2	Experiential- Learning7.1	AFT-VAL	Does	D,JC,LS	
CO 5	Describe the ethics about artificial insemination, abortion, antenatal sex, foetus, genetics and euthanasia.	2	Lecture	CE	Knows- how	L,L&PPT	
CO 5	Specify the importance of the Hippocratic Oath of the 5th century BC, the Nuremberg Code, 1948 and the Declaration of Geneva, 1948.	3	Experiential- Learning7.2	AFT-SET	Does	C_L,D	
CO 5	Describe the Universal declaration of human rights, 1948 and the Helsinki declaration, 1964.	3	Experiential- Learning7.3	AFT-VAL	Does	BS,D,DIS,RLE	
CO 5	Discuss the ethical principles of the Belmont Report	3	Experiential- Learning7.4	AFT-RES	Does	DIS,PL,SDL	
CO 5	Explain Moahida e buqratiya, zabta e Hamurabi and Ethical codes for the physicians as constituted by NCISM.	4	Practical7.1	CE	Shows- how	PER,RP,SDL,TUT	
ى آداب Unit 2	Peshewarana Sulook aur Tibbi Aadab (Professional Conduct and Medical E پیشہدواراندسلوک اورط	tiquettes)					
7.2.1 Introd	uction						
7.2.2 Standards of professional conduct							
7.2.3 Characteristics of medical physicians/students							
7.2.4 Duties of the physicians as per Unani medicine.							
7.2.5 Acts o	f professional misconduct.						

7.2.6 Patient confidentiality,

7.2.7 Honesty & integrity and medical negligence

7.2.8 ABC's of Etiquettes, i.e. Appearance, Behaviour, Communication

7.2.9 Duties of practitioner to public and paramedical profession

7.2.10 Professional malpractice

7.2.11 Consent

- 7.2.11.1 Doctrine of full disclosure
- 7.2.11.2 Doctrine of informed refusal
- 7.2.11.3 Therapeutic privilege
- 7.2.11.4 Loco parentis
- 7.2.11.5 Emergency Doctrine

7.2.11.6 Vicarious Liability

References: 2,6,8,11,17,18,28,31,32,33,34,35,36,37,38,39,44,45,46,52,53,54,55,56,57,58,61,62,63,69,70,71,72,77,84

3A	3В	3C	3D	3E	3F	3G
CO 5	Describe Professional Misconduct and acts related to medical negligence/professional misconduct.	2	Lecture	CAN	Knows- how	BS,C_L,D
CO 5	Describe various Acts of professional misconduct and honesty, and integrity. In a mock scenario, eliciting the loss of integrity of a medical professional.	4	Practical7.2	PSY-SET	Shows- how	BS,L&GD,L&PPT
CO 5	Illustrate and prepare the consent of the Doctrine of full disclosure, informed refusal and Therapeutic privilege.	2	Experiential- Learning7.5	СК	Does	BS,L&GD
CO 5	Illustrate and prepare consent, Loco parentis and Emergency Doctrine.	2	Experiential- Learning7.6	СК	Does	FC,PAL,PL,PER

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CO 5	Describe the medical etiquette, their aims and objectives and impacts.	1	Lecture	сс	Knows- how	L&PPT	
CO 1	Describe the responsibilities of a practitioner towards fellow practitioners, the paramedical profession, and towards the public in general.	4	Practical7.3	PSY-SET	Shows- how	BL,BS,D	
CO 1	Present the ABCs of Etiquettes like Appearance, Behaviour and Communication in public practice.	2	Experiential- Learning7.7	СК	Does	BS,L&PPT	
خلاقیات Unit 3	Tehqeeqati Akhlaqiyat (Research Ethics)						
7.3.1 Introdu	uction						
7.3.2 Aims a	and objectives						
7.3.3 Import	ance of Research Ethics						
7.3.4 Main a	areas of Focus in Research ethics						
7.3.4.1 Integrity							
7.3.4.2 Research misconduct (falsification, fabrication and plagiarism)							
7.3.4.3 Colla	aboration issues (authorship, data ownership and management)						
7.3.4.4 Peer review							
7.3.4.5 Cont	flicts of interest or obligation						
7.3.4.6 Com	plicity and funding sources						
7.3.4.7 Human subject research							
7.3.4.8 IEC & Board of Research							
References:	84,87,88,93						
3A	3В	3C	3D	3E	3F	3G	

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CO 5	Describe research ethics, its history, aims & objectives, principles and importance.	2	Lecture	ск	Knows- how	L,L&PPT
CO 5	Discuss Integrity, Research misconduct (falsification, fabrication and plagiarism) and Collaboration issues (authorship, data ownership and management) in research.	4	Practical7.4	AFT-VAL	Shows- how	BS,D,DIS,PAL
CO 5	Demonstrate Peer review, Conflicts of interest or obligation, Complicity and funding sources and Human subjects in research	4	Practical7.5	PSY-SET	Shows- how	BL,BS,DIS,PAL,SDL
CO 5	Prepare a case report on falsification.	3	Experiential- Learning7.8	PSY-SET	Does	BS,CBL,IBL,SDL
CO 5	Prepare a case report on fabrication.	3	Experiential- Learning7.9	CAN	Does	BS,DIS,PAL
CO 5	Establish a journal Club on plagiarism.	3	Experiential- Learning7.10	AFT-SET	Does	BL,C_L,D,DIS

Practical Training Activity

Practical 7.1 : Moahaida e buqratiya, zabta e Hamurabi and Ethical codes for the physicians constituted by NCISM.

Total learning hours: 4 Hours

Step-1: Explanation by teacher (1 Hour (30 Min.)

1. The teacher will explain the Moahida e buqratiya (Hippocratic Oath), Zabta e Hamurabi (Codes of Hamurabi) and Ethical codes for the physicians constituted by NCISM.

Step-2: Seminar Presentation by students (1 hour)

2. The student will prepare a PowerPoint presentation and present it in class.

Step-3: Discussion on applicability and practices (1 hour)

3. The teacher will rectify as required and conduct an open discussion on applicability, practices, etc.

Step-4: Recording of the activity: (30 Min.)

4. The activity will be recorded in the practical file.

Practical 7.2 : Practical demonstration of professional misconduct by a medical practitioner.

Total learning hours: 4 Hours

Step-1: Description and scenario presentation by teacher: (2 Hours 30 Minutes)

1. The teacher will describe the various Acts of professional misconduct, honesty and integrity and create a mock scenario eliciting the loss of integrity of a medical professional.

Step-2: Description by students after understanding the scenario and the topic (1 hour)

2. The student will observe the scenario and describe the professional misconduct, honesty and integrity in the form of a group discussion or mini-seminar.

Step-4: Recording of the activity: (30 Minutes)

3. The activity will be recorded in the practical file.

Practical 7.3 : Responsibilities of a practitioner.

Total learning hours: 4 Hours

Step-1: Explanation by teacher (1 Hour 30 Minutes)

1. The teacher will explain the responsibilities of a practitioner towards fellow practitioners, the paramedical professionals/personnel, and towards the public in general.

Step-2: Presentation by students (1 hour)

2. The student will prepare a PPT and present it in the class

Step-3: Discussion and rectification (1 hour)

3. The teacher will rectify as required and put the topic for open discussion in the class.

Step-4: Recording of the activity: (30 Min.)

4. The activity will be recorded in the practical file.

Practical 7.4 : Integrity, Research misconduct and Collaboration issues in research.

Total learning hours: 4 Hours

Step-1: Explanation of topic by teacher (1 Hour 30 Minutes)

1. The teacher will discuss about the Integrity, Research misconduct (falsification, fabrication and plagiarism) and Collaboration issues (authorship, data ownership and management) in research.

Step-2: Preparation and presentation of digital content (2 Hour)

- 2. The student will prepare digital content on the topic and present it in the class.
- 3. The teacher will rectify as required.

Step-3: Recording of the activity: (30 Min.)

4. The activity will be recorded in the practical file.

Practical 7.5 : Demonstration of the focused areas of research

Total learning hours: 4 Hours

Step-1: Explanation of topic and assignment of research paper (2 Hours 30 Minutes)

- 1. The teacher will discuss the focused area of research, i.e. Peer review, Conflicts of interest or obligation, Complicity and funding sources and Human subjects
- 2. The teacher will assign a clinical research paper to the student.

Step-2: Analysis and presentation by student (1 hour)

- 3. The student will critically analyse the paper as per the discussion with the teacher.
- 4. The student will prepare a PowerPoint and present the journal in class.

Step-3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential learning Activity

Experiential-Learning 7.1 : Ethical practices adopted by Unani physicians.

Total learning hours: 2 Hours

Step-1: Study and discussion with the teacher (1 hour)

- 1. The student is expected to study the ethics recorded in classical Unani literature
- 2. The student will discuss with the teacher.

Step-2: Observation and presentation (1 hour)

- 3. The student will visit the attached teaching hospital and observe two to three practising Unani physicians.
- 4. The student will observe the ethics adopted by them.
- 5. The student will record the activity in the record book and present it in class.

Experiential-Learning 7.2 : Hippocratic oath of the 5th century, the Nuremberg code of 1948 and the Declaration of Geneva of 1948.

Total learning hours: 3 Hours

Step-1: Study (1 hour)

1. The student is expected to study the Hippocratic Oath of the 5th century BC, the Nuremberg Code of 1948, and the Declaration of Geneva, 1948.

Step-2: Pre-requisites and oath ceremony (1 Hour, 30 Minutes)

- 2. The student will prepare an oath including the above oaths.
- 3. The teacher will make a small group of interns attached to the hospital.
- 4. The interns will take the Oath.

Step-3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 7.3 : Universal declaration of human rights, 1948 and the Helsinki declaration, 1964.

Total learning hours: 3 Hours

Step-1: Study and observation by students (1 Hour)

- 1. The student is expected to study the Declaration of Human Rights, 1948 and the Helsinki Declaration, 1964.
- 2. The student will observe any event matched with these declarations.

Step-2: Preparation and presentation of report in class (1 Hour 30 Minutes)

- 3. The student will prepare a report and present it in class.
- 4. The teacher will rectify as required.

Step-3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 7.4 : Ethical principles of the Belmont Report.

Total learning hours: 3 Hours

Step-1: Description of topic and pre-requisites by teacher: (1 Hour)

- 1. The teacher will discuss the ethical principles of the Belmont Report with the students.
- 2. The students will be distributed in small groups.

Step-2: Observation and group discussion: 1 Hour 30 Min.)

- 3. Each group is expected to observe their seniors doing clinical trials in the attached teaching hospital in light of the Belmont Report.
- 4. A group discussion will be conducted in the class.

Note: Observation in Step-2 will be done over some time and is not intended to be included within the allocated National learning hours

Step-3: Recording of the activity: (30 Min.)

5. The activity will be recorded in the practical file.

Experiential-Learning 7.5 : Consent of Doctrine of full disclosure, informed refusal and Therapeutic privilege.

Total learning hours: 2 Hours

Step-1: Study the topic (1 hour)

1. The student is expected to study the consent of the Doctrine of full disclosure, informed refusal and Therapeutic privilege.

Step-2: Preparation and presentation of digital content (1 hour)

- 2. The student will prepare digital content on it and present it in the class.
- 3. The teacher will rectify if required.

Note: Preparation of digital content will be considered as homework and not included in National learning hours.

Experiential-Learning 7.6 : Consent of Loco Parentis and Emergency Doctrine.

Total learning hours: 2 Hours

Step-1: Study and discussion (1 hour)

1. The student is expected to study the concept of Loco parentis and the Emergency Doctrine and discuss with the teacher.

Step-2: Preparation and presentation of digital content (1 hour)

- 2. The student will prepare digital content on it and present it in the class.
- 3. The teacher will rectify as required.

Note: Preparation of digital content will be given as homework, and the time of preparation is not included in National learning hours.

Experiential-Learning 7.7 : ABCs of Etiquettes like Appearance, Behaviour and Communication in public practice.

Total learning hours: 2 Hours

Step-1: Study the topic (1 hour)

1. The student is expected to study the ABCs of Etiquette, like Appearance, Behaviour and Communication in public practice.

Step-2: Observe the ABCs of practitioners in the attached hospital.

- 2. The student will observe 2-3 practising Unani Physicians in the attached hospital concerning the topic.
- 3. He will prepare a report about their Etiquettes like Appearance, Behaviour and Communication

Note: National learning hours will not be allotted for the observation in step 2, as students will do the said observation and prepare the report in their regular OPD/IPD duties over time.

Step-3: Presentation and discussion in the class (1 hour)

- 4. The report will be presented and then discussed in the class by the students in the presence of a teacher.
- 5. The teacher will rectify as required.

Experiential-Learning 7.8 : Case report on falsification.

Total learning hours: 3 Hours

Step-1: Explanation by teacher (1 Hour)

1. The teacher will explain to students about data falsification during research

Step-2: Observation by student: (1 Hour)

2. The student is expected to observe his seniors or colleagues doing clinical research in the hospital.

Step-3: Preparation of report: (1 Hour)

- 3. The student will prepare a case report on falsification.
- 4. The teacher will rectify.

Note: Observation in Step 2 will be done over a period of time and not intended to be included within the allocated National learning hours.

Experiential-Learning 7.9 : Case report on fabrication.

Total learning hours: 3 Hours

- Step-1: Explanation by teacher (1 hour)
 - 1. The teacher will explain to students about data fabrication during research

Step-2: Observation by student: (1 Hour)

2. The student is expected to observe his seniors or colleagues doing clinical research in the hospital.

Step-3: Preparation of report: (1 Hour)

- 3. The student will prepare a case report on fabrication.
- 4. The teacher will rectify.

Experiential-Learning 7.10 : Journal Club on plagiarism.

Total learning hours: 3 Hours

Step-1: Pre-requisites (2 hours)

- 1. The teacher will discuss plagiarism with the student and select a paper for the student.
- 2. The student is expected to study the paper and critically analyse that paper.
- 3. The student will check the content of the paper using plagiarism software and find out the percentage of plagiarism.

Step-2: Presentation by student (1 hour)

- 4. The student is expected to present their observations in the class
- 5. The teacher will rectify as required.

Note: Points 2 and 3 of step 1 are considered as homework and not meant to be done during the period of National learning hours.

Modular Assessment			
Assessment method	Hour		
Formative Assessment: 4 Hours			
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.			
1. Viva (10 marks):			
Viva will be conducted by the teacher, and 5 questions (2 marks each) covering all units will be asked.			
2. Journal Club Presentation/Case Report (20 marks):	4		
Any Journal Club Presentation or any case report presentation from Units 2 & 3.	4		
3. Class Teaching (20 Marks):			
The student will be assessed through the class teaching of any topic from Units 1 or 2			
Or			
Any practical in converted form can be taken for assessment (25 marks). &			
Any of the experiential portfolios/reflections/presentations can be taken as an assessment (25 marks).			

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

Practical No*	Practical name	Hours
1.1	Recording of Oral/documentary evidence.	3
1.2	Demonstration of consent and its doctrine.	5
1.3	Bhartiya Nagarik Suraksha Sanhita and Bharatiya Nyaya Sanhita, 2023.	3
1.4	Inquest, its types and importance.	3
1.5	The Pre-Conception and Prenatal Diagnostic Techniques (PC-PNDT) Act, 1994 and its amendments.	3
1.6	The Transplantation of Human Organs Act, 1994.	3
1.7	The Protection of Children from Sexual Offences (POCSO) Act 2004.	3
1.8	Artefacts due to Post-mortem Changes.	4
1.9	Narco-Analysis: principles and procedure.	3
2.1	Identification of Race, Religion and Sex.	3
2.2	Identification of sex from skeletal remains.	3
2.3	Examination of Hair.	4
2.4	Identification with Handwriting, Speech, Voice, Ticks, Manner and Habit	4
2.5	Importance of Scar and Tattoo Marks in Identification.	4
2.6	Preparation of various types of fingerprints.	4
2.7	Poroscopy v/s Dactylography.	4
2.8	Demonstration of Lip Prints.	4
3.1	Journey of Ilmul Samoom.	5
3.2	Challenges faced while dealing with toxicological conditions.	5
3.3	Unani Concept of Tasammum and its correlation with the modern concept.	5

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3.4	Preparation of wet specimens of plant poisons.	5
4.1	General use of Tiryaqat is available in Classical Unani Literature.	5
4.2	Case reports mentioned in classical Unani literature.	5
4.3	Drugs and Cosmetics Act, 1940, rules and their amendments.	5
4.4	Narcotic Drugs and Psychotropic Substances Act, 1985.	5
5.1	Applied anatomy of the Male & Female skeleton and their reproductive organs.	3
5.2	Demonstration of the use of X-ray, USG, and CT scan in medico-legal cases.	4
5.3	Blood grouping & Rh system, with its medical-legal importance.	5
5.4	Correlation between Homeostasis and the concept of Akhlat.	4
5.5	Medico-legal aspects of allergy and anaphylaxis.	4
6.1	Pathology of scar.	2
6.2	Common pathological conditions due to physical and chemical agents.	2
6.3	Collection of body fluids.	2
6.4	Use of biochemistry in crime.scene investigation.	2
6.5	Examination of blood/semen stain at a crime scene.	2
6.6	Forensic importance of hair at a crime scene.	3
6.7	Examination of sweat/saliva/milk/sputum stains at a crime scene.	3
6.8	Demonstration of microbes of Forensic importance.	2
6.9	Identification of microbes in the secretions of a dead body.	2
7.1	Moahaida e buqratiya, zabta e Hamurabi and Ethical codes for the physicians constituted by NCISM.	4
7.2	Practical demonstration of professional misconduct by a medical practitioner.	4
7.3	Responsibilities of a practitioner.	4
7.4	Integrity, Research misconduct and Collaboration issues in research.	4

7.5	Demonstration of the focused areas of research	4

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

Experiential learning No*	Experiential name	Hours
1.1	Police station visit	4
1.2	Description of the importance of consent in the legal system.	4
1.3	Roles and responsibilities of a Doctor as an expert witness.	6
1.4	Documentary evidence.	6
1.5	Functioning of the court.	5
1.6	Bharatiya Sakshya Adhiniyam, 2023.	5
1.7	Clinical Establishment Act, 2010, and its applicability to AYUSH practitioners.	4
1.8	Polygraph test, Brain Fingerprinting and Narco-Analysis.	5
2.1	Race, Religion and Sex of a dead body available in the mortuary.	4
2.2	Miscellaneous methods of Identification.	4
2.3	Case presentation on stature, scar and tattoo marks and their medicolegal importance.	5
2.4	Collection of fingerprints from various sites.	5
2.5	Fingerprint developmental techniques.	4
2.6	Palatoscopy/palatoprints/rugoscopy.	4
2.7	Rugoscopy and Frontal sinus print.	4
2.8	Vascular grooves and sutural patterns.	5
2.9	Ear print, Nose print, Nail print, EV method of identification, and 'Barium meal' X-ray of the stomach.	4
3.1	Medico-Legal Aspects of Poisons.	4
3.2	Diagnosis of a case of poisoning in Living.	5

3.3	Diagnosis of poisoning in the dead.	5
3.4	Duties of a Unani physician in a case of suspected poisoning.	3
3.5	Identification and collection of plant poisons available in the nearby locality.	5
3.6	Failure to detect poison.	4
4.1	Preparation of Tiryaq from mufrad drug.	4
4.2	Preparation of Murakkab Tiryaq.	4
4.3	Diagnosis and management of poisoning.	5
4.4	The Drugs and Cosmetics Act, 1940.	5
4.5	Misleading Advertisement and ADR Reporting.	4
4.6	The detoxification process of toxic drugs.	4
5.1	Surface anatomy of the human body of medico-legal significance.	3
5.2	Regional anatomy of medico-legal significance.	3
5.3	Gross anatomy of the heart and coronary arteries.	3
5.4	Gross anatomy of lungs and brain of forensic significance.	2
5.5	Gross applied physiology of forensic importance of Circulatory, Respiratory and Haemopoietic Systems.	2
5.6	Gross applied physiology of forensic importance of Nervous, Digestive and Endocrine Systems.	3
5.7	Gross applied physiology of forensic importance of Excretory, Urogenital and Musculoskeletal Systems.	3
5.8	Dental radiography (X-rays), Dental impression analysis and Dental morphology analysis.	2
5.9	Collection of dental evidence and analysis.	2
5.10	Estimation of the age of skeletal remains through anthropometric study of teeth.	3
6.1	Significance of forensic pathology in the identification of human remains.	3
6.2	Identification of the pathological changes of forensic significance of wounds.	3
6.3	Responsibility of a forensic expert in a mass disaster.	3

6.4	Pathological changes related to infancy and old age and their forensic relevance.	2
6.5	Importance of trace evidence at the crime scene.	4
6.6	Estimation of post-mortem interval from different enzymes produced in the body after death.	3
6.7	Significance of DNA profiling.	3
6.8	Demonstration of microorganisms of forensic importance.	2
6.9	Determination of Post Mortem Interval (PMI)	3
7.1	Ethical practices adopted by Unani physicians.	2
7.2	Hippocratic oath of the 5th century, the Nuremberg code of 1948 and the Declaration of Geneva of 1948.	3
7.3	Universal declaration of human rights, 1948 and the Helsinki declaration, 1964.	3
7.4	Ethical principles of the Belmont Report.	3
7.5	Consent of Doctrine of full disclosure, informed refusal and Therapeutic privilege.	2
7.6	Consent of Loco Parentis and Emergency Doctrine.	2
7.7	ABCs of Etiquettes like Appearance, Behaviour and Communication in public practice.	2
7.8	Case report on falsification.	3
7.9	Case report on fabrication.	3
7.10	Journal Club on plagiarism.	3

Table 6 : Assessment Summary: Assessment is subdivided in A to H points 6 A : Number of Papers and Marks Distribution

Subject Code	Paper	Theory	Practical	Total
UNIPG-AB-TQS	1	100	200	300

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

UNIPG-AB-TQS consists of 7 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment :Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment: Summative Assessment (University examination) will be carried out at the end of Semester II.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d*f/c*e*100
M1. طب القانون کے مبادیات، طب القانونی نظام اور اس کاطریقہ کار Tibbul Qanoon ke mabadiyat, Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal system and its procedure)	3	90		75		
M2. طبالقانون میں شاخت کی اہمیت Shanakht ki Ahmiyat (Significance of Identification in Forensic Medicine)	3	90		75		
M3. ^{علم} السموم کے مبادیات اور بنیاد کی اصول Mabadiyaat aur Bunyadi Usool (Basic Principles & Fundamentals of Toxicology)	2	60		50		
M4. اعلان سمیت کے بنیاد کی اصول Bunyadi Usool (Basics of Management of poisoning)	2	60		50		
M5. طبالقانون میں شرائتی علوم کے مبادیات کاطلاق Qanoon men Sherakati Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-I	2	60		50		
M6. طبالقانون ميں شرائتى علوم كے مباديات كاطلاق Qanoon me Sherakati Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-II	2	60		50		
ىپىثەروارانەسلوك وآداباور طبى دىخىقىقالى اخلاقيات . M7	2	60		50		

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Peshawarana Sulook wa Aadab aur Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics)					
MGP = ((Number of Notional learning hours attended in a module) X (Marks obtained in the modular assessment) / (Total number of Notional learning hours in the module) X (Maximum marks of the module)) X 100					

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPS of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA **SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester** Evaluation Methods for Modular Assessment

D: Semester Evaluation Methods for Semester Grade Point Average (SGPA)

A S.No	B Module number and Name	C MGP
1	M1 طب القانون کے مبادیات، طب القانون کاطریقہ کار. M1 Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal system and its procedure)	C 1
2	Tibbul Qanoon me Shanakht ki Ahmiyatطبالقانون میں شاخت کی اہمیت. M2 (Significance of Identification in Forensic Medicine)	C 2
3	M3. تعلم السموم کے مبادیات اور بنیادی اصول. M3 Usool (Basic Principles & Fundamentals of Toxicology)	C 3
4	M4. اعلان سمیت کے بنیادی اصول. M4 اعلان سمیت کے بنیادی اصول. M4 Management of poisoning)	C 4
5	Tibbul Qanoon men Sherakati Uloom طب القانون ميں شرائق علوم کے مباديات کالطلاق. M5 ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-I	C 5
6	M6. القانون ميں شرائق علوم کے مباديات کالطلاق ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-II	C 6
7	M7 ييشرواراند سلوك و آداب اورطبق بخفيقالى اخلاقيات. M7 Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics)	C 7
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7) / Number of modules(7)

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

MD/MS Unani Examination UNIPG-AB-TQS Sem II Time: 3 Hours ,Maximum Marks: 100 INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
یقنہ کار (M- 1) (Basics of l	(M- 1) طب القانون کے مبادیات، طب القانونی نظام اور اس کاطر یقد کار (Tibbul Qanoon ke mabadiyat, Tibbul Qanooni Nizam aur iska Tareeqakar (Basics of Medical Jurisprudence, Medico-legal system and its procedure) (Marks: Range 5-15)			
1	(U-1) تعادف،ابتراادرارنقا Ta'aruf, Ibtida aur Irtiqa (Introduction, Origin & Development)	No	Yes	No
2	(U-2) الإاف، مقاصداور مواقع (Ahda'af, Maqasid aur Mawaqai (Aims, Objectives & Scope)	No	Yes	No
3	(U-3) بندوستالی طب القانونی نظام;Hidustani Tibbul Qanooni Nizam (Medico-legal system in India)	No	Yes	Yes
4	(U-4) ط ب القانونی دستاویز کاری اور کاروائیاں (Tibbul Qanooni Dastavezkari aur Kar'wayian (Legal documentation and Procedure in Forensic Sciences)	No	Yes	Yes
5	(U-5) متعلقہ توانین برائے طبابت (Muta'alliqa Qawaneen Bara'e Tababat (Acts Related to Medical Practice)	No	Yes	Yes
6	(U-6) تغیرات کاذبه بعد الموت (Taghayyurate Kaziba B'adal Maut(Post mortem artefacts)	No	Yes	Yes
7	(U-7) العب القانون وعلم السموم ميس جديد اضافات (U-7) Jadeed Izafat (Modern advances in Forensic Medicine and Toxicology)	No	Yes	Yes
(M- 2) اہمیت Medicine)	(M- 2) طب القانون مين شاخت کي ايميت (Significance of Identification in Forensic طب القانون مين شاخت کي ايميت Medicine) (Marks: Range 5-20)			
1	(U-1) سلى، نه بي اور جنسى شاخت Nasli, Mazhabi aur Jinsi Shanakht (Identification of race, religion and sex)	Yes	Yes	Yes
2	(U-2) ^{چن} ن نووی ومیانی اورعکم التعر Jinse Nouvi wa Mayani aur Ilme Sha'r (Nuclear sexing, Intersex and trichology)	Yes	Yes	Yes
3	(U-3) کالعین Umr ka Tayyun (Estimation of Age)	Yes	Yes	Yes
4	(U-4) تندوقامت، ندبه اوروشی نشانات (Qado Qamat, Nadba aur Washmi Nishanat (Stature, Scar and Tattoo Marks)	Yes	Yes	Yes

5	(U-5) نثانات انکشت اور تنظیر مسامات (Nishanate Angusht aur Tanzeere Masamat (Dactylography & Poroscopy	Yes	Yes	Yes
6	Jism paimayi aur Tanzeere Shiyl ya بسم ييانى اور تنظير تيل يانشانات لب (U-6) Nishanate lub (Anthropometory and Cheiloscopy)	Yes	Yes	Yes
)اصول (M- 3) Toxicology	علم السموم کے مبادیات اور بنیاد کollmus Samoom ke Mabadiyaat aur Bunyadi Usool (Bas)) (Marks: Range 5-10)	sic Principles	s & Fundame	entals of
1	(U-1) تلم السموم کے مبادیات (Imus Samoom ke Mabadiyat (Basics of Toxicology)	No	Yes	Yes
2	سوم کے طب القانونی پہلواوران کی درجہ بند کی (U-2) Samoom ke Tibbe Qanooni Pehlu aur سوم کے طب القانونی پہلواوران کی درجہ بند کی (U-2) unki Darjabandi (Medico-legal aspects and classification of Poisons)	No	Yes	Yes
3	(U-3) تخفي سمي ت (Di agnosis of poisoning)	No	Yes	Yes
4	(U-4) سميانىدرجەبندى Sammiyati Darjabandi (Toxicological Classification)	No	Yes	Yes
)اصول (M- 4)	اعلان سميت کے بنیاد کا llaje Sammiyat ke Bunyadi Usool (Basics of Management o	f poisoning)	(Marks: Rar	nge 5-20)
1	laje Sammiyat ke Umoomi Usool (General اعلاج سمیت کے عمومی اصول (U-1) principles of management of poisoning)	Yes	Yes	Yes
2	(U-2) مومو سمم مستعلق ہندوستانی قوانین (Samoom wa Tasammum se Mutalliq Hindustani Qawaneen (Laws related to Poison and Poisoning in India)	Yes	Yes	Yes
(M- 5) تطب القانون مين شراكتن علوم کے مباديات Tibbul Qanoon men Sherakati Uloom ke Mabadiyat ka Itlaq (Application of Basics of allied sciences in forensic Medicine)-Part-I (Marks: Range 5)			of Basics of	
1	الطلاقی تشریح قانونی اور شعایات (U-1) الطلاقی تشریح قانونی اور شعایات (U-1) (Applied Forensic Anatomy and Radiology)	No	Yes	Yes
2	(U-2) ا طلاقی منافع الاعضا قانونی (Itlaqi Munafeul Aaza Qanooni (Applied Forensic Physiology)	No	Yes	Yes
3	(U-3) الطلاق علم الاسنان قانونى (Itlaqi Ilmul Asnan Qanooni (Applied Forensic Dentistry)	No	Yes	Yes
کاطلاق (M- 6) allied scier	تطب القانون ميں شرائق علوم کے مباديات Tibbul Qanoon me Sherakati Uloom ke Mabadiy. ces in forensic Medicine)-Part-II (Marks: Range 5-15)	at ka Itlaq (A	pplication of	Basics of
1	(U-1) اطلاق علم الامراض قانونی (Itlaqi Ilmul Amraz Qanooni (Applied Forensic Pathology)	No	Yes	Yes
2	(U-2) الطلاقى كيمياء حيويد قانونى (U-2) الطلاقى كيمياء حيويد قانونى (U-2) Biochemistry)	No	Yes	Yes
3	tlaqi Khurdhayatyat wa ilmul Hashrat اطلاقی خورد حیاتیات وعلم الحشرات قانونی (U-3) Qanooni (Applied Forensic Microbiology and Entomology)	No	Yes	Yes
(M- 7) يشروارانسلوك وآداب اورطبى وتحقيقاتى اطلاقيات (Peshawarana Sulook wa Aadab aur Tibbi wa Tahqeeqati Akhlaqiyat (Professional Conduct, Etiquettes and Medical & Research Ethics) (Marks: Range 5-20)			fessional	
1	Tibbi Akhlaqiyat (Medical Ethics) طبى اخلاقيات (U-1)	Yes	Yes	Yes
2	(U-2) پیشہ دارانہ سلوک اور طبی آداب (Peshewarana Sulook aur Tibbi Aadab (Professional Conduct and Medical Etiquettes)	Yes	Yes	Yes
3	Tehqeeqati Akhlaqiyat (Research Ethics) تحقيقاني اخلاقيات (U-3)	Yes	Yes	Yes

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

- 1. 100 marks question paper shall contain:-
- Application Based Question: 1 No (carries 20 marks)

Short Answer Questions: 8 Nos (each question carries 05 marks)

- Long Answer Questions: 4 Nos (each question carries 10 marks)
- 2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated "NO".

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Use the Blueprint provided in 6G or similar Blueprint created based on instructions 1 to 7

Blueprint				
Question No	Type of Question	Question Paper Format		
Q1	Application based Questions 1 Question 20 marks All compulsory	M2.U1 Or M2.U2 Or M2.U3 Or M2.U4 Or M2.U5 Or M2.U6 Or M4.U1 Or M4.U2 Or M7.U1 Or M7.U2 Or M7.U3 Or		
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory	1. M1.U1 Or . M1.U2 Or . M1.U3 Or . M1.U4 Or . M1.U5 Or . M1.U6 Or . M1.U7 2. M2.U1 Or . M2.U2 Or . M2.U3 3. M2.U4 Or . M2.U5 Or . M2.U6 4. M3.U1 Or . M3.U2 Or . M3.U3 Or . M3.U4 5. M4.U1 Or . M4.U2 6. M5.U1 Or . M5.U2 Or . M5.U3 7. M6.U1 Or . M6.U2 Or . M6.U3 8. M7.U1 Or . M7.U2 Or . M7.U3		
Q3	Analytical Based Structured Long answer Questions Four Questions 10 marks each All compulsory	1. M1.U1 Or . M1.U2 Or . M1.U3 Or . M1.U4 Or . M1.U5 Or . M1.U6 Or . M1.U7 Or . M2.U1 Or . M2.U2 Or . M2.U3 Or . M2.U4 Or . M2.U5 Or . M2.U6 2. M3.U1 Or . M3.U2 Or . M3.U3 Or . M3.U4 Or . M4.U1 Or . M4.U2 3. M5.U1 Or . M5.U2 Or . M5.U3 Or . M6.U1 Or . M6.U2 Or . M6.U3 4. M7.U1 Or . M7.U2 Or . M7.U3		

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long Practical or Case-1: One Major Practical from M-1 or M-2 or M-3 or M-4 Long Practical or Case-2: One Major Practical from M-4 or M-6	80
2	Short Practical: One Short Practical from M-1 or M-2: 20 Marks One Short Practical from M-3 or M-4: 20 Marks One Short Practical from M-5 or M-6: 20 Marks	60
3	Viva: 2 Examiners: 20 Marks Each	40
4	Log Book/Activity Record:	10
5	Practical Record:	10
Total Marks		200

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Abbreviations

Domain		T L Method		Level	
СК	Cognitive/Knowledge	L	Lecture	к	Know
сс	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	кн	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY- GUD	Psychomotor/Guided response	DIS	Discussions		
PSY- MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY- ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		

PER	Presentations
D-M	Demonstration on Model
РТ	Practical
X-Ray	X-ray Identification
CD	Case Diagnosis
LRI	Lab Report Interpretation
DA	Drug Analysis
D	Demonstration
D-BED	Demonstration Bedside
DL	Demonstration Lab
DG	Demonstration Garden
FV	Field Visit
JC	Journal Club
Mnt	Mentoring
PAL	Peer Assisted Learning
C_L	Co Learning