

COURSE CURRICULUM FOR SECOND PROFESSIONAL B.U.M.S

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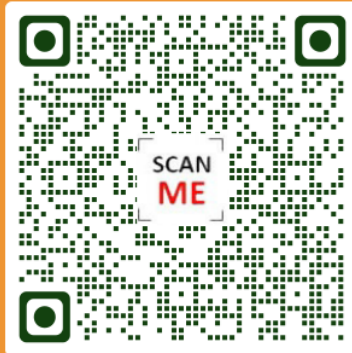
**ILMUL ADVIA
(PHARMACOLOGY)**

(SUBJECT CODE: UNIUG-IA)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)



**BOARD OF UNANI, SIDDHA AND SOWA-RIGPA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058**



NCISM_II BUMS_U

PREFACE

The framing of a syllabus is a vital part of the curriculum. It becomes far more important regarding the syllabus of Undergraduate courses. The present exercise of framing the syllabus of *Ilmul Advia* is competency-based and framed by experts, along with special experts from Botany and modern pharmacology. The syllabus has been justified through internal validation by formulating the learning objectives in tune with the present educational methodology. The domains that are involved in the learning process are duly considered. The syllabus has been rationalized in terms of learning domains, teaching-learning methods, and assessment methods. The rationalization of allotted teaching hours and marks with a weighted assessment is the basic asset of the present syllabus.

The subject of *Ilmul Advia* is multidisciplinary. The major Unani medical themes related to *Ilmul Advia* have been augmented by the fields of botany, chemistry, and pharmacology. The syllabus has been framed to impart the teaching to train a graduate student to employ the knowledge of *Ilmul Advia* for the welfare of a patient and the community as well. The students will be taught the commonly available medicinal plants, their identification, and their therapeutic efficacy based on the concepts of Unani medicine. Present knowledge and documented reports of actions will be also taught so that the relevance of *Ilmul Advia* in clinical practice is made reliable and valid. It will ensure to familiarise the trainee with 216 plant-origin drugs, 19 animal-origin drugs, and 28 mineral-origin drugs. The syllabus contents have been fine-tuned for learning outcomes, course outcomes, and programme outcomes.

The basic programme for framing the syllabus of *Ilmul Advia* revolves around Unani pharmacotherapy, viewed from the perspective of the basic principles underlying drug actions, its use, and the availability of standard drugs. The learning process is designed similarly. The principles of pharmacotherapeutics are comprehensively interwoven with the fundamental principles of Mizāj, Akhlāt, and Quwwa. The concoction and evacuation of the morbid Khilt or matter by using the drugs of the Unani medicine as emphasized for treatment of Muzmin Amrāz (chronic diseases, the principles of Ilaj bi'l Didd, Kamiyat, and related factors that affect the action of a drug are also emphasized in the syllabus.

It has been made more robust by incorporating appropriate TL methods that precisely demarcate the cognitive, psychomotor, and affective domains. Course outcomes have given thrust to applying fundamental principles in clinical practice. The fundamental principles of *Ilmul Advia* help select a drug for a diseased patient. These principles justify and value the aspects of collection, identification, authentication, and adulteration or substitution of Unani drugs. The direct relationship between basic principles is seen in the way *Advia Mufrada* is studied and applied in the administration of these drugs. Practical exposure to various aspects of *Ilmul Advia* has been amply incorporated. The practical incorporated in the syllabus will help the trainees to identify a plant, animal product, or mineral from which a drug is prepared. The Mizaj evaluation of the Unani drugs along with the practical exposure to aspects of physico-chemical parameters that help in standardization and regulation of drugs in the market. Even the learning of theoretical and cognitive aspects has been rendered interesting and more relevant by adding a variety of activities. The emphasis on the pivotal concepts of Mizāj-i-*Advia*, Af'āl, and Ta'thirāt on the body as a whole and the individual organs or systems is hoped to help the learners develop adequate competencies for being good clinicians.

NCISM

II Professional Kamile Tib o Jarahat

(Bachelor of Unani Medicine and Surgery – B.U.M.S)

Subject Code: UNIUG-IA

ILMUL ADVIA (PHARMACOLOGY)

Summary

Total number of Teaching hours: 320			
Lecture hours (LH)-Theory		120 Hours	120 (LH)
Paper I	60 Hours		
Paper II	60 Hours		
Non Lecture hours (NLH)-Theory		60 Hours	200 (NLH)
Paper I	30 Hours		
Paper II	30 Hours		
Non Lecture hours (NLH)-Practical		140 Hours	

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	100	30	-	20
Paper II	100				
Sub-Total	200	150			
Total marks	350				

Important Note:-The User Manual II BUMS 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 II 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 curriculum write to cur.imp@ncismindia.org

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Course Code and Name of Course

Course code	Name of Course
UNIUG-IA	Ilmul Advia

Table 1- Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) UNIUG-IA At the end of the course UNIUG-IA, the students should be able to-	B1 Course learning outcomes mapped with program learning outcomes.
CO1	Appraise the landmark developments of Ilmul Advia	PO1
CO2	Demonstrate and apply the fundamental principles of Ilmul Advia in clinical practice	PO1,PO2,PO5
CO3	Justify and value the aspects related to collection, Identification, authentication, substitution, adulteration and recent research information of Advia Mufrada	PO2,PO3
CO4	Classify and demonstrate Advia Mufrada with respect to Unani Pharmacotherapy	PO2,PO4
CO5	Apply the concept of Mizāj-i-Advia and their Darajāt in ensuring safety and efficacy of Unani Drugs	PO2,PO3
CO6	Categorize the general and specific actions of Advia Mufrada on various organs and system	PO1,PO2
CO7	Apply the knowledge of fundamental approaches of modern pharmacology in augmenting the clinical outcome of Unani System of Medicine	PO3,PO4
CO8	Illustrate the research aptitude related to Ilmul Advia.	PO2,PO5,PO8

Table 2 : Contents of Course

Paper 1					
Sr.No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours (Theory)
1	<p>علم الادویہ کا تعارف (Ilmul Advia ka Ta'aruf) Introduction of Ilmul Advia</p> <p>A. علم الادویہ کی اہمیت و تاریخی پس منظر (Ilmul Advia ki Ahmiyat wa Tārikhī Pas-i-Manzar) Importance of Ilmul Advia and its Historical Background</p> <p>B. کلیات ادویہ کی تعریف و اہمیت (Kulliyāt-i-Advia kī Ta'rīf wa Ahmiyat) Definition and Scope of Kulliyāt-i-Advia</p>	1		1	1
2	<p>دواء، غذا و ذوالخاصہ: تعریف اور اہمیت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance</p> <p>A. دواء کی تعریف (Dawā kī Ta'rīf) Introduction of drug</p> <p>B. دوائے غذائی کی تعریف (Dawā'-i-Ghidhā' i kī Ta'rīf) Introduction of Dawā'-i-Ghidhā' i</p> <p>C. غذا کی تعریف (Ghidhā' ki Ta'rīf) Introduction of Nutrition</p> <p>D. غذائے دوائی کی تعریف (Ghidhā'-i-Dawā' i kī Ta'rīf) Introduction of Ghidhā'-i-Dawā' i</p> <p>E. ذوالخاصہ کی تعریف (Dhu'l Khāssa kī Ta'rīf) Introduction of Dhu'l Khāssa</p>	1	13	1	1

	<p>F. ماڈہ، کیفیت اور صورت نوعیہ کے لحاظ سے دواء، غذا اور ذوالخاتمہ (Mādda, Kayfiyat aur Sūrat-i-Naw'iyya ke Lihāz se Dawā', Ghidhā' and Dhu'l Khāssa) Mādda, Kayfiyat aur Sūrat-i-Naw'iyya as the basis of Dawā', Ghidhā' and Dhu'l Khāssa</p>			
3	<p>ماخذ ادویہ (Ma'ākhidh Advia) Sources of Drugs</p> <p>A. نباتات: مختلف اجزاء و ترشحات (Nabātāt: Mukhtalif Ajzā' wa Turashshuhāt) Drugs of Plant origin: Plant parts and exudates</p> <p>B. جمادات: ذوی الاجساد، ذوی النفوس، ذوی الارواح، اور گلہ (Jamādāt: Dhawī'l-Ajsād, Dhawī'l-Nufūs, Dhawī'l- Arwāh aur Gil) Drugs of Mineral and other inorganic sources: Dhawī'l-Ajsād, Dhawī'l-Nufūs, Dhawī'l-Arwāh and clays)</p> <p>C. حیوانات: مختلف اعضاء، اجزاء و محصولات (Haywānāt: Mukhtalif A'dā', Ajzā' wa Mahsūlāt) Animal origin drugs: Different organs, parts and derivatives</p>	1	1	1
4	<p>مزاج ادویہ: تعریف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types</p> <p>A. تعریف و اہمیت (Ta'rīf wa Ahmiyat) Introduction and importance</p> <p>B. اقسام بلحاظ کیفیت اور ان کی اہمیت (Aqsām Balihāz-i-Kayfiyat aur unki Ahmiyat) Types according to quality</p> <p>C. اقسام بلحاظ ترکیب اور ان کی اہمیت (Aqsām Balihāz-i-Tarkīb aur unki Ahmiyat) Types according to Tarkīb and their importance</p> <p>D. درجات مزاج ادویہ (Darajāt-i-Mizāj Advia) Grades of Mizāj-i-Advia</p> <p>i. تعریف و اہمیت (Ta'rīf wa Ahmiyat) Definition and importance</p>	1	1	1

	<p>ii. اقسام (Aqsām) Types</p> <p>E. سمی ادویہ و تریاق (Sammī Advia wa Tiryāq) Poisonous drugs and Antidotes</p> <p>i. سمی ادویہ کی تعریف (Sammī Advia ki Ta’rīf) Introduction of Poisonous drugs</p> <p>ii. سموم اور سمی ادویہ کے مابین فرق (Samūm aur Sammī Advia ke Mābain farq) Difference between Samūm and Sammī Advia</p> <p>iii. تریاق: تعریف (Tiryāq: Ta’rīf) Antidote: Definition</p>				
5	<p>تاثيرات ادویہ (Ta’thirāt-i-Advia) Effects of the drugs</p> <p>A. تعریف (Ta’rīf) Definition</p> <p>B. اقسام (Aqsām) Types</p> <p>1. اقسام بلحاظ استحالہ (Aqsām Balihāz-i- Istihāla) Types according to metabolism</p> <p>i. تاثيرات اولی (Ta’thirāt-i-‘Ūla) Primary effects</p> <p>ii. تاثيرات ثانیه (Ta’thirāt-i-Thāniya) Secondary effects</p> <p>iii. تاثيرات متشابهہ الاولی (Ta’thirāt Mutashābih al-‘Ūla)</p>	1		2	2

	<p>Effects extended from primary effect</p> <p>2. اقسام بلحاظ کیفیت (Aqsām Balihāz-i-Kayfiyat) Types according to Kayfiyat</p> <p>i. تاثیرات اولی (Ta'thīrāt-i-'Ūla) Primary effects</p> <p>ii. تاثیرات ثانیہ (Ta'thīrāt-i-Thāniya) Secondary effects</p> <p>iii. تاثیرات ثالثہ (Ta'thīrāt-i-Thālitha) Tertiary effects</p> <p>3. متفرق تاثیرات (Mutafarriq Ta'thīrāt) Miscellaneous</p> <p>i. متضاد تاثیر (Mutadād Ta'thīr) Opposite effect</p> <p>ii. خصوصی تاثیر (Khusūsi Ta'thīr) Specific effect</p>				
6	<p>افعال ادویہ بلحاظ کیفیت و نوعیت عمل (Af'āl-i-Advia Balihāz-i-Kayfiyat wa Naw'iyat-i-'Amal) Actions related to Advia according to effect and mechanism of action</p> <p>A. حار کیفیت سے متعلق افعال (Hār Kayfiyat se Mut'alliq Af'āl) Actions as per the Hār Kayfiyat</p> <p>(1) مُحلِّل Muḥallil (Resolvent)</p> <p>(2) مُسخِّن Musakhkhin (Calorific)</p> <p>(3) قاطع</p>	1	11	5	3

<p>Qāti' (Remover of viscous humour)</p> <p>(4) مُفْتَحِ سُدَدٍ</p> <p>Mufattih Sudad (Deobstruent)</p> <p>(5) جاذِب</p> <p>Jādhīb (Absorbent)</p> <p>(6) مُلَطِّف</p> <p>Mulattif (Demulcent)</p> <p>(7) مُحرِّك اعصاب و دماغ</p> <p>Muḥarrrik-i-'Asāb wa Dimāgh (Nerve and brain stimulant)</p> <p>(8) مُعْطِّس</p> <p>Mu'atṭis (Errhine)</p> <p>(9) أَكَّال</p> <p>Akkāl (Corrosive)</p> <p>(10) جَالِي</p> <p>Jāli (Detergent)</p> <p>(11) كاسِر رِيَّاح</p> <p>Kāsir-i-Riyāḥ (Carminative)</p> <p>(12) مُشْتَتِي بَعَام</p> <p>Mushtahī Ṭa'ām (Appetizer)</p> <p>(13) مُعْطِّش</p> <p>Mu'atṭish (Dipsetic)</p> <p>(14) هَاضِم</p> <p>Hāḍim (Digestive)</p> <p>(15) مُفْتَتِي حَصَاة</p> <p>Mufattit-i-Ḥasāh (Lithotriptic)</p> <p>(16) حَالِق</p> <p>Hāliq</p> <p>(17) حَكَّاك</p> <p>Ḥakkāk (Irritant)</p> <p>(18) كَاوِي</p> <p>Kāwī (Escharotic)</p>				
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<p>(19) مُصْمِرٌ Muḥammir (Rubefacient)</p> <p>(20) مُبْثَثِرٌ Mubaththir (Eruptive)</p> <p>(21) لَادِئٌ Lādhi' (Irritant)</p> <p>(22) مُنْفِطٌ Munaffit (Vesicant)</p> <p>(23) مُفَجِّجٌ أَوْرَامٍ Mufajjir-i-Awarām (suppurative)</p> <p>(24) مُدَامِلٌ Mudammil (Healing agent)</p> <p>(25) مُقَرَّرِيحٌ Muqarriḥ (Ulcerative)</p> <p>(26) مُهَيَّيْجٌ Muhayyij</p> <p>(27) مُدِرٌّ حَيْضٍ Mudirr-i-Ḥayḍ (emmenagogue)</p> <p>(28) مُنْفِجٌ اخْلَاطِ ثَلَاثَةٍ Mundij-i-Akhlāt-i-Thalātha (Concoctive of three humours)</p> <p>(29) مُحَرِّكٌ دَوْرَانِ خُونٍ Muharrik-i-Dawrān-i-Khūn (Circulatory stimulant)</p> <p>B. بارو کیفیت سے متعلق افعال (Bārid Kayfiyat se Mut'alliq Af'āl) Actions as per the Bārid Kayfiyat</p> <p>(1) مُبَرِّدٌ Mubarrid (Refrigerant)</p> <p>(2) مُجَمِّدٌ Mujammid (Coagulant)</p> <p>(3) مُسَكِّنٌ</p>				
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<p>Musakkin (Sedative)</p> <p>(4) مُسَكِّنُ الْمِ</p> <p>Musakkin-i-Alam (Analgesic)</p> <p>(5) مُسَكِّنُ اعْصَابٍ وَدِمَاحٍ</p> <p>Musakkin-i-‘Aṣāb wa Dimāgh (Sedative of nerve and brain)</p> <p>(6) مَنْوَمٌ</p> <p>Munawwim (Hypnotic)</p> <p>(7) مُخَدِّرٌ</p> <p>Mukhaddir (Anaesthetic)</p> <p>(8) مُغَطِّطٌ مَعْنَى</p> <p>Mughalliz-i-Manī</p> <p>(9) رَادِعٌ</p> <p>Rādi’ (Repellent)</p> <p>(10) مُصَلِّبٌ</p> <p>Muṣallib</p> <p>C. رطب کیفیت سے متعلق افعال (Raṭab Kayfiyat se Mut’alīq Af’āl) Actions as per the Raṭab Kayfiyat</p> <p>(1) مُرَطِّبٌ</p> <p>Muraṭṭīb (Moisturizer)</p> <p>(2) دَابِقٌ</p> <p>Dābiq (Sticky)</p> <p>(3) مُرَخِّی</p> <p>Murkhī (Relaxant)</p> <p>(4) مُمَلِّسٌ</p> <p>Mumallis (Lubricant)</p> <p>(5) مُغْرِی</p> <p>Mugharrī</p> <p>(6) مُلِّیْنِ اِمْعَاءِ</p> <p>Mulayyin-i-Am‘ā’ (Laxative)</p> <p>(7) مُبْحِرٌ</p>				
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<p>Mubakhkhir (Flatulent)</p> <p>(8) مولدیدیح</p> <p>Muwallid-i-Riyāh</p> <p>(9) مزلق</p> <p>Muzliq (Lubricating agent)</p> <p>D. یاہس کیفیت سے متعلق افعال</p> <p>(Yābis Kayfiyat se Mut‘alliq Af‘āl)</p> <p>Actions as per the Yābis Kayfiyat</p> <p>(1) مُجَفِّف</p> <p>Mujaffif (Desiccant)</p> <p>(2) قاشر</p> <p>Qāshir (Sloughing agent)</p> <p>(3) ناشف</p> <p>Nāshif (Desiccant)</p> <p>(4) خاتم</p> <p>Khātim (Cicatrizant)</p> <p>(5) منبت لحم</p> <p>Munbit-i-Laḥm (Flesh granulating agent)</p> <p>(6) عاصر</p> <p>‘Āsir (Squeezer)</p> <p>(7) قابض</p> <p>Qābiḍ (Astringent)</p> <p>(8) مدمل</p> <p>Mudammil (Healing agent)</p> <p>(9) مغزلی</p> <p>Mugharrī</p> <p>(10) مُسَدِّد</p> <p>Musaddid (Obstruent)</p> <p>(11) حابس</p> <p>Hābis (Static)</p> <p>(12) قابض امعاء</p> <p>Qābiḍ-i-Am‘a’ (Intestinal astringent)</p>				
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<p>(13) مُسِك مَنِي Mumsik-i-Manī (Retentive of semen)</p> <p>(14) حَابِس دَم Ḥābis-i-Dam (Haemostyptic)</p> <p>E. صورت نوعیه سے متعلق افعال (Sūrat-i-Naw'iyya se Mut'alliq Af'āl) Actions related to Sūrat-i-Naw'iyya</p> <p>(1) مَقْوِي اعصاب و دماغ Muqawwi-i-'Aṣāb wa Dimāgh (Nerve & brain tonic)</p> <p>(2) مَقْوِي قَلْب Muqawwi-i-Qalb (Cardio-tonic)</p> <p>(3) مَقْوِي جِغَر Muqawwi-i-Jigar (Liver tonic)</p> <p>(4) مَقْوِي طَحَال Muqawwi-i- Ṭihāl (Spleen tonic)</p> <p>(5) مَقْوِي مَعْدَه Muqawwi-i-Mi'da (Stomachic)</p> <p>(6) مَقْوِي اَمْعَاء Muqawwi-i-Am'ā' (Intestinal tonic)</p> <p>(7) مَقْوِي كُرْدَه Muqawwi-i-Gurda (Renal tonic)</p> <p>(8) مَقْوِي مَثَانَه Muqawwi-i-Mathāna (Urinary bladder tonic)</p> <p>(9) مَقْوِي بَاه Muqawwi-i-Bāh (Aphrodisiac)</p> <p>(10) مَقْوِي عَام Muqawwi-i-'Ām (General tonic)</p> <p>(11) مَقْوِي بَصَر Muqawwi-i- Baṣar (Eye tonic)</p> <p>(12) مَقْوِي شَعْر Muqawwi-i-Sha'r (Hair tonic)</p>				
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<p>(13) مطوّل شعر Muṭawwil-i-Sha‘r</p> <p>(14) منبت شعر Munbit-i-Sha‘r (Trichogen/Hair grower)</p> <p>(15) منقّث بلغم Munaffith-i-Balgham (Expectorant)</p> <p>(16) قاتل ديدان امعاء Qātil-i-Dīdān-i-Am‘ā’ (Anthelmintic)</p> <p>(17) مولد دم Muwallid-i-Dam (Haemopoetic)</p> <p>(18) مولد منى Muwallid-i-Manī (Semenogenic)</p> <p>(19) مولد لبن Muwallid-i-Laban (Galactopoietic)</p> <p>(20) مدر لبن Mudirr-i-Laban (Lactagogue)</p> <p>(21) مخرج ديدان امعاء Mukhrij-i-Dīdān-i-Am‘ā’ (Vermifuge)</p> <p>(22) مخرج جنين ومشيّم Mukhrij-i-Janīn wa Mashīma (Abortifacient)</p> <p>(23) معرق Mu‘arriq (Diaphoretic)</p> <p>(24) دافع حمى Dāfi‘-i-Ḥumma (Antipyretic)</p> <p>(25) مسهل Mushil (Purgative)</p> <p>(26) مسكّن معده Musakkin-i-Mi‘da</p> <p>(27) مسكّن قلب Musakkin-i-Qalb</p> <p>(28) دافع تشنّج Dāfi‘-i-Tashannuj (Antispasmodic/Anticonvulsant)</p>				
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	<p>(29) دافع تعفن Dāfi‘-i-Ta‘affun (Antiseptic)</p> <p>(30) مُصَفِّي دَم Muṣaffi-i-Dam (Blood purifier)</p> <p>(31) معدّل اخلاط ثلاثه Mu‘addil-i-Akhlāt Thalātha (Moderator of three humours)</p> <p>(32) مغذّي Mughadhdhi (Nutrient)</p> <p>(33) مُفْتَح ثَقَبِ عَيْنِيّه Mufattiḥ-i-Thuqba-i-‘Inabiyya (Mydriatic)</p> <p>(34) مُضَيِّق ثَقَبِ عَيْنِيّه Muḍayyiq-i-Thuqba-i-‘Inabiyya (Miotic)</p> <p>(35) مفرّح Mufarriḥ (Exhilarant)</p> <p>(36) مُدِرِّر بَوْل Mudirr-i-Bawl (Diuretic)</p> <p>(37) مُتَقِي Muqī (Emetic)</p> <p>(38) مُلَذِّذ Muladhdhidh (Pleasant)</p> <p>(39) مُسَهِّل اخلاط ثلاثه Mushil-i-Akhlāt Thalātha (Purgative of three humours)</p> <p>(40) مُسَمِّن بَدَن Musammin-i-Badan (Adipogenous)</p>				
7	<p>یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs</p> <p>دواء کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā’ ke Ajzā-i-Tarkībī: Fa‘āl wa Dīgar Ajzā’) Composition of drugs: Active and other constituent</p> <p>Plant metabolites; difference between primary and secondary metabolites, advantages of secondary metabolites, active and inactive constituents.</p>	2	10	2	1

	<p>A. Primary plant metabolites; introduction, definition, and properties.</p> <p>i. اجزائے شکر یہ Ajzā-i-Shakariyya (Carbohydrates)</p> <p>ii. اجزائے لحمیہ Ajzā-i-Lahmiyya (Proteins and Amino Acids)</p> <p>iii. اجزائے شحمیہ Ajza-i-Shahamiyya (Lipids)</p> <p>iv. حیاتین Hayatīn (Vitamins)</p> <p>v. اجزائے خشبیہ Ajzā-i-Khashbiyya (Fibres)</p> <p>vi. اجزاء لونیہ Ajzā-i-Lawniyya (Pigments)</p> <p>B. Secondary plant metabolites; introduction definition and properties with relevant examples of Unani drugs</p> <p>i. Alkaloids :</p> <p>(A) Classification based on origin: (a) True alkaloids (morphine, atropine etc.) (b) Proto/amino alkaloids (colchicines, ephedrine etc.) (c) Pseudo alkaloids (caffeine, solasodine etc.)</p> <p>(B) Classification on the basis of chemical structures: (a) Non-Heterocyclic alkaloids eg. Colchicine (Colchicum sp), Taxol (Taxus sp) etc. (b) Heterocyclic alkaloids eg. Morphine (Opium), Quinine (Cinchona), Nicotine (Tobacco) etc.</p> <p>ii. Glycosides: (a) Anthraquinone glycosides (b) Cardiac glycosides (c) Saponin glycosides (d) Cynogenetic glycosides (e) Isothiocyanate</p>				
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	<p>glycosides (f) Coumarin glycosides (g) Flavone glycosides (h) Bitter glycosides</p> <p>iii. Terpenoids: (a) Monoterpenoids (b) Sesquiterpenoids (c) Diterpenoids (d) Triterpenoids; Triterpenes, Steroids, Saponins, Steroidal Alkaloids (e) Tetraterpenoids; Carotenoids</p> <p>iv. Phenols: (a) Flavonoids – Anthocyanins, Anthocyanidins, Flavones, Flavnols (b) Tannins (c) Coumarins (d) Lignins</p> <p>v. Plant resins: (a) Oleoresins (b) Gum resin (c) Oleogum resin (d) Glycoresins (e) Balsams</p> <p>vi. روغن فراری Roghan-i-Farāri (Volatile oil/Essential oil)</p> <p>vii. روغن کثیف Roghan-i-Kathīf (Fixed Oil)</p> <p>viii. Latex</p> <p>ix. Plant gums</p>				
8	<p>ادویہ کی طبعی خصوصیات (Advia kī Taba‘ī Khusūsiyāt) Physical properties of drugs</p> <p>A. تعریف و اہمیت (Ta’rīf wa Ahmiyat) Definition and importance</p> <p>B. عمومی طبعی خصوصیات (‘Umūmī Taba‘ī Khusūsiyāt) General physical characteristics</p> <p>C. خصوصی طبعی خصوصیات (Khusūsi Taba‘ī Khusūsiyāt) Specific physical characteristics</p>	2		1	1
9	مختلف نظام جسمانی و اعضاء پر ادویہ مفردہ کے اثرات	2	10	7	3

(Mukhtalif Nizām-i-Jismānī wa A‘ḍā’ par Advia Mufrada ke Atharāt)

Effects of Advia Mufrada on different body systems and organs

A. نظام اعصاب پر ادویہ کے اثرات

(Nizām-i-A‘ṣāb par Advia ke Atharāt)

Effects of drugs on the nervous system

1. دماغ و نخاع پر ادویہ کے اثرات

Dimāgh aur Nukha‘ par Advia ke Atharāt

a. محرکات

Muharrikāt

i. مُدّی

Muhadhdhi (Deliriant)

ii. مفرّج

Mufarriḥ (Exhilarant)

b. مضعفات

Muḍ‘ifāt

i. مسکن

Musakkin (Sedative)

ii. منوم

Munawwim (Hypnotic)

iii. مخدّر

Mukhaddir (Anaesthetic)

2. اعصاب حسّیہ پر ادویہ کے اثرات

A‘ṣāb par Advia ke Atharāt

a. اعصاب حسّیہ پر ادویہ کے اثرات

A‘ṣāb-i-Hissiya par Advia ke Atharāt

i. محرک اعصاب حسّیہ

Muḥarrik-i-A‘ṣāb-i-Hissiya

ii. مضعف اعصاب حسّیہ

Muḍ‘if-i-A‘ṣāb-i-Hissiya

b. اعصاب حرکیہ پر ادویہ کے اثرات

	<p>A'sāb-i-Ḥarkiyya par Advia ke Athrat</p> <p>i. محرک اعصاب حرکتیہ Muharrik A'sāb Ḥarkiya</p> <p>ii. مضعف اعصاب حرکتیہ Muḍ'if A'sāb Ḥarkiya</p> <p>B. نظام قلب و دوران خون پر ادویہ کے اثرات (Nizām-i-Qalb wa Dawrān-i-Khūn par Advia ke Atharāt) Effects of drugs on Cardiac and Cardiovascular system.</p> <p>1. قلب پر ادویہ کے اثرات Qalb par Advia ke Atharāt</p> <p>i. مقوی قلب Muqawwi-i-Qalb</p> <p>ii. مفرح Mufarriḥ-i-Qalb</p> <p>iii. مضعف قلب Muḍ'if-i-Qalb</p> <p>2. عروق پر ادویہ کے اثرات 'Urūq par Advia ke Atharāt</p> <p>i. مفتحات عروق Mufattiḥāt-i-'Urūq</p> <p>ii. قابضات عروق Qābidāt-i-'Urūq</p> <p>3. عروق شعریہ پر ادویہ کے اثرات 'Urūq-i- Sha'riya par Advia ke Atharāt</p> <p>i. مدلل قروح Mudammil-i-Qurūḥ</p> <p>ii. مقرر Muqarriḥ</p> <p>iii. منفط Munaffiṭ</p> <p>iv. محرر Muḥammir</p>				
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	<p>v. اکال Akkāl</p> <p>vi. کاوی Kāwī</p> <p>4. خون پر ادویہ کے اثرات Khūn par Advia ke Atharāt</p> <p>i. مجر Mujammid</p> <p>ii. مولد Muwallid</p> <p>iii. مصفی Muṣaffi</p> <p>iv. معدل Mu‘addil</p> <p>v. حابس Hābis</p> <p>C. نظام تنفس پر ادویہ کے اثرات (Nizām-i-Tanaffus par Advia ke Atharāt) Effects of drugs on Respiratory system</p> <p>1. مرکز تنفس پر ادویہ کے اثرات Markaz-i-Tanaffus per Advia ke Atharāt</p> <p>i. محرک Muḥarrik</p> <p>ii. مضعف Muḍ‘if</p> <p>2. ریہ پر ادویہ کے اثرات Ri‘a Par Advia ke Atharāt</p> <p>i. محرک اعصاب ریہ Muḥarrik A‘ṣāb-i-Ri‘a</p> <p>ii. مضعف اعصاب ریہ Muḍ‘if A‘ṣāb-i-Ri‘a</p>				
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	<p>3. تصدیتہ الریہ پر ادویہ کے اثرات Qasba al-Ri'a par Advia ke Atharāt</p> <p>i. منقث بلغم Munaffith-i-Balgham</p> <p>ii. دافع سعال Dāfi'-i-Su'āl</p> <p>iii. دافع تشنج Dafi'-i-Tashannuj</p> <p>iv. دافع تعفن Dāfi'-i-Ta'affun</p> <p>D. نظام ہضم پر ادویہ کے اثرات (Nizām-i-Hadm par Advia ke Atharāt) Effects of drugs on Digestive system</p> <p>1. لسان، دندان و لثہ پر ادویہ کے اثرات (Lisān, Dandān wa Liththa par Advia ke Atharāt) Effect of drugs of toungue, Teeth and gum</p> <p>i. دافع تعفن Dafi'-i-Ta'affun</p> <p>ii. مسکن Musakkin</p> <p>iii. قابض Qābiḍ</p> <p>iv. مخدر Mukhaddir</p> <p>2. غدولعیابیہ پر ادویہ کے اثرات (Ghudad-i-Lu'abiyya par Advia ke Atharāt) Effect of drugs on salivary glands</p> <p>i. مدر لعاب دہن Mudirr-i-Lu'āb-i-Dahan</p> <p>ii. مقلل لعاب دہن Muqllil-i-Lu'āb-i-Dahan</p> <p>3. معدہ پر ادویہ کے اثرات</p>				
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	<p>Mi'da par Advia ke Atharāt</p> <p>i. مقوی معدہ</p> <p>Muqawwi-i-Mi'da</p> <p>ii. دافع حموضت</p> <p>Dāfi'-i-Ḥumūdat</p> <p>iii. دافع ترشح</p> <p>Dāfi'-i-Tarashshuḥ</p> <p>v. مقی</p> <p>Muqī</p> <p>vi. دافع قی</p> <p>Dafi'-i-Qay'</p> <p>vii. ہاضم</p> <p>Hādim</p> <p>viii. دافع تبخیر</p> <p>Dāfi'-i-Tabkhīr</p> <p>ix. مشتی</p> <p>Mushtahī</p> <p>4. جگر پر ادویہ کے اثرات</p> <p>Jigar par Advia ke Atharāt</p> <p>i. مقوی جگر</p> <p>Muqawwi-i-Jigar</p> <p>ii. مدر صفراء</p> <p>Mudirr-i-Ṣafra</p> <p>iii. معدل صفراء</p> <p>Muaddil-i-Ṣafra</p> <p>5. امعاء پر ادویہ کے اثرات</p> <p>Am'ā' par Advia ke Atharāt</p> <p>i. قابض</p> <p>Qābiḍ</p> <p>ii. ملین</p> <p>Mulayyin</p> <p>iii. کاسرریاح</p>				
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	<p>Kāsir-i-Riyāh</p> <p>iv. مسلمات</p> <p>Mushilāt</p> <p>a. باعتبار خلط</p> <p>Ba I'tibār-i-Khilt</p> <p>i. مسهل صفراء</p> <p>Mushil-i-Şafra</p> <p>ii. مسهل بلغم</p> <p>Mushil-i-Balgham</p> <p>iii. مسهل سوداء</p> <p>Mushil-i-Sawda</p> <p>b. باعتبار شدت و خفت</p> <p>Ba I'tibār-i-Shiddat wa Khiffat</p> <p>i. مسهل قوی</p> <p>Mushil Qawī</p> <p>ii. مسهل ضعیف</p> <p>Mushil Za'īf</p> <p>c. باعتبار نوعیت عمل</p> <p>Ba I'tibār Naw'ıyyat-i- 'Amal</p> <p>i. مسهل بالتخلیل والجذب</p> <p>Mushil bi't Taḥlīl wa al-Jadhb</p> <p>ii. مسهل بالعصر</p> <p>Mushil bi'l 'Aşr</p> <p>iii. مسهل بالازلاق</p> <p>Mushil bi'l Izlāq</p> <p>iv. مسهل بالاذابت</p> <p>Mushil bi'l Idhābat</p> <p>v. مسهل بالتطیح والحلاء</p> <p>Mushil bi't Taqtı' wa al-Jilā '</p> <p>v. قاتل دیدان</p> <p>Qātil-i-Dīdān</p> <p>iv. مخرج دیدان</p> <p>Mukhrij-i-Dīdān</p>				
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	<p>E. نظام بول پر ادویہ کے اثرات (Nizām-i-Bawl par Advia ke Atharāt) Effects of drugs on Urinary system</p> <p>i. مدرات بول Mudirrāt-i-Bawl</p> <p>ii. مانع اورار Māni‘ Idrār</p> <p>iii. مفتت حصاة Mufattit-i-Ḥasāh</p> <p>iv. مانع عفونت Māni‘-i-‘Ufūnat</p> <p>v. مغیر اجزاء بول Mughayyir Ajzā-i-Bawl</p> <p>F. نظام تولید و تناسل پر ادویہ کے اثرات (Nizām-i-Tawlīd wa Tanāsul par Advia ke Atharāt) Effects of drugs on Reproductive system</p> <p>1. مردانہ اعضاء تولید و تناسل A‘dā’-i- Tawlīd wa Tanāsul Mardāna</p> <p>i. مقوی باہ Muqawwi-i-Bāh</p> <p>ii. قاطع باہ Qāti‘ Bāh/Mud‘if Bāh</p> <p>iii. مغلظ منی Mughalliz-i-Manī</p> <p>2. اعضاء تولید و تناسل زنانہ A‘dā’-i-Tawlīd wa Tanāsul Zanāna</p> <p>i. مدر حیض Mudirr-i-Ḥayḍ</p> <p>ii. تخرج جنین و مشیمہ Mukhrij-i-Janīn wa Mashīma</p> <p>iii. مسکن رحم</p>				
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	<p>Musakkin-i-Raḥim iv. مقوی رحم</p> <p>Muqawwi-i-Raḥim v. مولد لبن</p> <p>Muwallid-i-Laban vi. مقلل لبن</p> <p>Muqallil-i-Laban vii. منغیر لبن</p> <p>Mughayyir-i-Laban</p> <p>G. بالوں پر ادویہ کے اثرات (Bālon par Advia ke Atharāt) Effects of drugs on Hair</p> <p>i. منبت شعر Munbit-i-Sha‘r</p> <p>ii. مسود شعر Musawwid-i-Sha‘r</p> <p>iii. حالق Hāliq</p> <p>iv. ادویہ صابنہ Advia Sabigha</p> <p>v. مقوی و مطول شعر Muqawwi wa Muṭawwil-i-Sha‘r</p> <p>H. غدود (غده درقیہ، بانقراس) پر ادویہ کے اثرات (Ghudad (Ghudda-i-Darqiyya, Bānqarās) par Advia ke Atharāt) Effects of drugs on glands; Thyroid, Pancreas</p> <p>i. محرکات Muḥarrikāt</p> <p>ii. مضعفات Muḍ‘ifāt</p> <p>I. جلد پر ادویہ کے اثرات (Jild par Advia ke Atharāt)</p>				
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	<p>Effects of drugs on skin</p> <p>i. معرقات Mu‘arriqāt</p> <p>ii. مانعات عرق Mani‘āt-i-Irq</p> <p>iii. مغیرات عرق Mughaiyyirat-i-Irq</p> <p>iv. مملیات Mumallisāt</p> <p>v. مرئیات Murkhiyyāt</p> <p>J. آنکھ پر ادویہ کے اثرات (Ankh par Advia ke Atharāt) Effects of drugs on Eye</p> <p>a. طبقہ ملتمحہ پر ادویہ کے اثرات Ṭabqa-i-Multaḥima par Advia ke Atharāt</p> <p>i. ادویہ قابضہ Advia Qābida</p> <p>ii. مسکن الم Musakkin-i-Alam</p> <p>iii. دافع عفونت Dāfi‘-i-‘Ufūnat</p> <p>iv. محرش Mukhrish</p> <p>b. طبقہ عنیبہ پر ادویہ کے اثرات Ṭabqa-i-‘Inabiyya par Advia ke Atharāt</p> <p>i. مفتوح ثقبہ عنیبہ Mufattiḥ-i-Thuqba-i-‘Inabiyya</p> <p>ii. مضیق ثقبہ عنیبہ Muḍayyiq-i-Thuqba-i-‘Inabiyya</p> <p>c. غدد معیبہ پر ادویہ کے اثرات Ghudad-i-Dam‘iyya par Advia ke Atharāt</p> <p>i. محرک ترشح ادویہ</p>				
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	<p>Muḥarrrik Tarashshuh Advia</p> <p>ii. مضفف ترشخ ادوٲٲ</p> <p>Mud‘if-i-Tarashshuh Advia</p> <p>d. مقوٲ بصر ادوٲٲ</p> <p>Muqawwi-i-Başar Advia</p> <p>K. اذن؁ انف و حلق ٲر ادوٲٲ ك؁ اثرات</p> <p>(Udhun, Anf wa Ḥalq par Advia ke Atharāt)</p> <p>Effects of drugs on Ear, Nose and Throat</p> <p>i. مسكن الم</p> <p>Musakkin-i-Alam</p> <p>ii. قابض</p> <p>Qābiḍ</p> <p>iii. دافع عفونت</p> <p>Dafi‘-i-‘Ufūnat</p> <p>iv. معطس</p> <p>Mu‘aṭṭis</p> <p>v. مرطب</p> <p>Murattib</p> <p>vi. محرک شامه</p> <p>Muḥarrrik-i-Shāmma</p> <p>vii. مضفف شامه</p> <p>Muḍ‘if-i- Shāmma</p> <p>L. نظام عظام و عضلات ٲر ادوٲٲ ك؁ اثرات</p> <p>(Nizām-i-‘Izām wa Adlāt par Advia ke Atharāt)</p> <p>Effects of drugs on Musculoskeletal system</p> <p>i. مقوٲ عظام</p> <p>Muqawwi-i-‘Izām</p> <p>ii. مدمل</p> <p>Mudammil</p> <p>iii. مرخي عضلات</p> <p>Murkhī-i-‘Aḍalāt</p> <p>iv. مقوٲ عضلات</p> <p>Muqawwi-i-‘Aḍalāt</p>				
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10	<p>نامعلوم ادویہ کی معلومات کے ذرائع: قیاس و تجربہ (Na Ma‘lūm Advia ki Ma‘lūmāt ke Zarā’i: Qayās wa Tajriba) Principles and methods of drug development in Unani Medicine: Analogy and experimentation.</p> <p>A. قیاس کی تعریف، اہمیت (Qayās ki Ta’rīf wa Ahmiyat) Definition and importance of Analogy</p> <p>B. امور قیاس، دواء کا استحالہ، رنگ، بو، مزہ، قوام، وزن Umūr-i-Qayās: Dawā’ ka Istihāla, Rang, Bū, Maza, Qiwām, Wazan</p> <p>C. تجربہ کی تعریف و اہمیت (Tajriba kī Ta’rīf wa Ahmiyat) Definition and importance of experiment</p> <p>D. شرائط تجربہ (Sharā’iṭ-i-Tajriba) Principles of experiment</p> <p>E. محرکات تجربہ (Muḥarrrikāt-i-Tajriba) Stimuli for experiment</p>	2	11	2	1
11	<p>تحفظ ادویہ و ادویہ کی ذخیرہ اندوزی (Tahaffuz-i-Advia wa Advia ki Zakhīra Andozī) Storage and preservation of Unani drugs</p>	3		1	0

12	<p>حصول ادویہ (Huṣūl Advia) Collection of drugs</p> <p>A. تعریف و اہمیت (Ta'rīf wa Ahmiyat) Definition and Importance</p> <p>B. حصول کے اوقات (Huṣūl ke Awqāt) Time of collection</p>	3		1	0
13	<p>اعمال ادویہ A'mār-i-Advia (Shelf life of drugs)</p> <p>A. تعریف و اہمیت (Ta'rīf wa Ahmiyat) Definition and importance</p> <p>B. ادویہ نباتیہ کے مختلف اجزاء کے اعمال (Advia Nabātiyya ke Mukhtalif Ajzā' ke A'mār) Shelf life of different parts of plants</p> <p>C. ادویہ حیوانیہ کے اعمال (Advia Ḥaywāniyya ke A'mār) Shelf life of different parts of Animals</p> <p>D. ادویہ معدنیہ کے اعمال (Advia Ma'daniyya ke A'mār) Shelf life of different Ma'dani Advia</p>	3		1	0
14	<p>ادویہ مفردہ میں ملاوٹ (Advia Mufrada men Milāwat) (Adulteration in Unani single drugs)</p> <p>A. تعریف (Ta'rīf) Definition</p> <p>B. اقسام Aqsām (Types)</p>	3		1	1

	<p>C. اسباب Asbāb (Causes)</p> <p>D. ملاوٹ کے طریقے (Milāwat ke Tarīqe’) Way of adulteration</p> <p>E. چند مخصوص ادویہ میں ملاوٹ اور ان کی پہچان کے طریقے (Chand Makhsūs Advia me Milāwat aur unko pata lagāne ke Tarīqe’) Some Important adulterants and methods of identification</p>				
15	<p>مقدار خوراک کا تعین اور اس کی اہمیت (Miqdār-i-Khūrāq ka Ta’ayyun aur is kī Ahmiyat) Dose determination and its importance</p> <p>A. تعریف (Ta’rīf) Definition</p> <p>B. تعین کے اصول (Ta’ayyun ke ‘Uṣūl) Principles of estimation</p> <p>C. اطلاقی اہمیت (Itlāqi Ahmiyat) Clinical significance</p>	3		1	0
16	<p>اشکال ادویہ (Ashkāl-i-Advia) Dosage forms of drugs</p> <p>تعریف (Ta’rīf) Definition</p> <p>اقسام (Aqsām) Classification</p> <p>A. جامد Jāmid 1. سنوف مع درجات</p>	3	19	4	2

<p>(Sufūf Ma' Darajāt) Powder with grades</p> <p>i. سنون (Sanūn) Tooth powder</p> <p>ii. مضموغ Maḍūgh (Masticatory)</p> <p>iii. برودو کحل (Barūd wa Kuḥl) Eye dusting powder Collyrium</p> <p>iv. ذرور (Dharūr) Dusting powder</p> <p>v. نفوخ (Nafūkh) Insufflation</p> <p>vi. عطوس (‘Atūs) Snuff</p> <p>vii. غازه (Ghāza) Face powder</p> <p>viii. غاليه (Ghāliya) Perfumed powder</p> <p>2. حب Ḥabb (Pill)</p> <p>3. قرص Qurṣ (Tablet)</p> <p>4. شياف Shiyāf (Suppository)</p> <p>5. حمول Ḥamūl (Tampon)</p> <p>6. فرزجه (Firzajā) Pessary</p> <p>7. فتيله (Fatīla) Medicated wick</p> <p>8. رب/عصاره يابس (Rubb/‘Uṣāra Yābis) Dry extract</p> <p>9. نوره</p>				
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<p>Nawra</p> <p>10. نشوق</p> <p>Nashūq</p> <p>11. كماء</p> <p>(Kimād) Fomentation</p> <p>B. نیم جامد نیم سیال</p> <p>Nīm Jāmid/Nīm Saiyyāl</p> <p>1. معجون</p> <p>Ma'jūn</p> <p>2. اطرینفل</p> <p>Iṭrīfal</p> <p>3. انوشدارو</p> <p>Anoshdārū</p> <p>4. لبوب</p> <p>Labūb</p> <p>5. یاقوتی</p> <p>Yāqūtī</p> <p>6. برششاء</p> <p>Barsha'shā'</p> <p>7. زرعونی</p> <p>Zar'ūnī</p> <p>8. جوارش</p> <p>Jawārish</p> <p>9. دیاقوزه</p> <p>Dayāqūza</p> <p>10. خمیره</p> <p>Khamīra</p> <p>11. دواء المسک</p> <p>Dawāul misk</p> <p>12. مفرح</p> <p>Mufarriḥ (Exhilarant)</p>				
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<p>13. مربی Murabba</p> <p>14. گلقتد Gulqand</p> <p>15. لعوق La`uq (Linctus)</p> <p>16. حلوی Halwa</p> <p>17. قیروطی Qayrūṭī (a kind of ointment)</p> <p>18. مرہم Marḥam (Ointment)</p> <p>19. ضماد Dimāḍ (Paste)</p> <p>20. تریاق Tiryāq</p> <p>C. سیال (Saiyyāl) Liquid</p> <p>1. جوشاندہ Joshānda (Decoction)</p> <p>2. خیساندہ Khisānda (Infusion)</p> <p>3. شربت Sharbat (Medicated Syrup)</p> <p>4. سکنجبین Sikanjabīn (Oxymel)</p> <p>5. سرکہ / خل (Sirka /Khall) Vinegar</p> <p>6. آبکامہ، مری، کانجی (Abkāma, Marī, Kānjī) Liquid obtained by fermentation</p> <p>7. زلال</p>				
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<p>(Zulāl) Decant liquid</p> <p>8. لعابات (Lu‘ābāt) Mucilages</p> <p>9. محلول Maḥlūl (Solution)</p> <p>10. مزيج Mazīj (Mixture)</p> <p>11. ماء العسل Mā’ al-‘Asal (Honey water)</p> <p>12. ماء الشعير Mā’ al-Sha’īr (Barley water)</p> <p>13. ماء الجبن Mā’ al-Jubn</p> <p>14. ماء اللحم Mā’ al-Laḥm (Distillate of meat)</p> <p>15. ماء البقول (Mā’ al-Baqūl)</p> <p>16. ماء الفواكه Mā’ al-Fawākiḥ (Fruit juice)</p> <p>17. روح Rūḥ (Essence)</p> <p>18. شراب Sharāb</p> <p>19. نبيذ (Nabīdh) Enzymatic fluid</p> <p>20. صبغ (Sabīgh) Tincture</p> <p>21. صبغ/صبغة (Ṣibgh/Ṣibgha) Dyes</p> <p>22. شيره/حليب Ḥalīb/Shīra</p> <p>23. طلاء</p>				
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<p>Ṭilā (Liniment)</p> <p>24. نطول Naṭūl</p> <p>25. سكوپ Sakūb</p> <p>26. غسول (Ghasūl) Washing agent</p> <p>27. آبزَن (Ābzan) Sitz bath</p> <p>28. پاشويِه (Pāshoya) Foot bath</p> <p>29. مسوح Masūḥ</p> <p>30. مروخ Marūkh</p> <p>31. دلوک Dalūk</p> <p>32. دُهن (Duhn) Oil/Fats</p> <p>33. نضوح Naḍūḥ</p> <p>34. سعوٹ Sa'ūt</p> <p>35. وجور Wajūr</p> <p>36. زروق (Zarūq) Liquid used for syringing</p> <p>37. مضمضه (Maḍmaḍa) Mouth wash</p> <p>38. غرغره (Gharghara) Gargle</p> <p>39. خضاب (Khidāb) Hair dyes</p>				
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	<p>40. حقنہ (Huqna) Enema</p> <p>41. قطور (Qaṭūr) Drops</p> <p>D. بخاری Bukhārī</p> <p>1. بخور Bakhūr (Fumigation)</p> <p>2. انکباب Inkibāb (Steam inhalation)</p> <p>3. شوم Shamūm</p> <p>4. نخلخہ Lakhlakha</p>				
17	<p>مسالک ادویہ (Masālik-i-Advia) Routes of administration of drugs</p> <p>مختلف مسالک کے فوائد و نقصانات Mukhtalif Masālik ke Fawā'id wa Nuqsānāt (Advantages and disadvantages of different routes of drug administration)</p> <p>A. داخلی مسالک (Dakhilī Masālik) Internal Route</p> <p>B. خارجی مسالک (Khariji Masālik) External Route</p> <p>A. داخلی مسالک (Dakhilī Masālik) Internal Route</p> <p>a. طبعی مسالک (Taba'ī Masālik)</p> <p>b. غیر طبعی مسالک (Ghair Taba'ī)</p> <p>a. طبعی مسالک (Taba'ī Masālik)</p> <p>i. براہ دہن (Barah-i-Dahan) Oral</p> <p>ii. تحت اللسان (Tahat al-Lisān) Sublingual</p> <p>iii. براہ چشم (Barah-i-Chashm) Intraocular</p>	3		1	1

	<p>iv. براہ اذن (Barāh-i-Udhun) Ear</p> <p>v. براہ انف (Barāh-i-Anf) Intranasal</p> <p>vi. براہ مجاری تنفس (Barāh-i-Majari-i-Tanaffus) Inhalational</p> <p>vii. براہ مبرز (Barāh-i-Mabraz) Rectal</p> <p>viii. براہ اہلیل (Barāh-i-Ahlīl) Urethral</p> <p>ix. براہ مہبل (Barah-i-Mahbal) Vaginal</p> <p>b. غیر طبعی مسالک (Ghair Taba'i Masalik)</p> <p>i. اندرون ادمہ (Andarūn-i-Adma) Intradermal</p> <p>ii. اندرون عضلات (Andarūn-i-Aḍalat) Intramuscular</p> <p>iii. تحت الجلد (Tahat al-Jild) Subcutaneous</p> <p>iv. اندرون ورید (Andarūn-i-Warīd) Intravenous</p> <p>v. اندرون شراکین (Andarūn-i-Shara'in) Intraarterial</p> <p>vi. اندرون قلب (Andarūn-i-Qalb) Intracardiac</p> <p>vii. اندرون غشا الریہ (Andarūn-i-Ghish al-Ri'a) Intrapleural</p> <p>viii. اندرون مفاصل (Andarūn-i-Mafasil) Intraarticular</p> <p>ix. اندرون باریطون (Andarūn-i-Bāritūn) Intraperitoneal</p> <p>x. اندرون رحم (Andarūn-i-Rahem) Intrauterine</p> <p>xi. اندرون نخاع (Andarūn-i-Nukha') Spinal</p> <p>xii. Intracerebral</p> <p>xiii. Intracerebroventricular</p> <p>xiv. Epidural</p> <p>xv. Intrathecal</p> <p>B. خارجی مسالک (Khariji Masalik) External Route</p> <p>Topical and Transdermal</p>				
18	<p>مضرت ادویہ اور ان کے مصلحات (Maḍarrat-i-Advia aur unke Musliḥat) Adverse effects of drugs and their correctives</p> <p>A. مضرت ادویہ (Maḍarrat-i-Advia) Adverse Drug Reaction- ADR</p> <p>i. تعریف و اہمیت (Ta'rif) Definition and Importance</p>	3	1	0	

	<p>ii. مضر ت کے مختلف پہلو (Maḍarrat ke Mukhtalif Pahlū) Different aspects of toxicity</p> <p>B. مصلحات مضر ت ادویہ (Muṣliḥāt-i-Maḍarrat-i-Advia) Correctives of Adverse Drug reaction</p> <p>i. تعریف واہمیت (Ta'rīf wa Ahmiyat) Definition and Importance</p> <p>ii. مصلحات کے مختلف پہلو (Muṣliḥāt ke Mukhtalif Pahlū) Different aspects of correctives</p>				
19	<p>ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta'aruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine</p>	3		1	1
20	<p>ابدال ادویہ (Abdāl-i-Advia) Therapeutic interchange</p> <p>i. تعریف و اقسام (Ta'rīf wa Aqsām) Definition and types</p> <p>ii. بنیادی اصول (Buniyādī 'Uṣūl) Basic principles</p> <p>iii. ضرورت واہمیت (Darūrat wa Ahmiyat) Need and Importance</p>	3		1	0
21	<p>تزام و تناقض ادویہ (Tazā'id wa Tanāquḍ-i-Advia) Synergism and antagonism of drug</p> <p>i. تعریف واہمیت (Ta'rīf wa Ahmiyat)</p>	3		1	0

	Introduction and Importance ii. اقسام (Aqsām) Types				
22	ادویہ جدیدہ (Advia Jadīda) Modern Pharmacology Definition, Scope, Branches and common terminologies	1	10	1	0
23	Pharmacokinetics: Drug absorption, distribution, metabolism, excretion, and elimination (ADME) kinetics	1		2	0
24	Pharmacodynamics: Mechanism of drug action and factors affecting drug action	1		2	0
25	Important Concepts of Modern Pharmacology 1. Pharmacotherapy 2. Essential drugs and Rational use 3. Life saving drugs 4. Concept of Ethnopharmacology 5. Herbalism and herbo-mineral therapies 6. Herb-drug interactions 7. Phytopharmaceuticals 8. Nutraceuticals 9. Modern drug discovery and development process 10. Clinical Pharmacology	1		2	1
26	Pharmacological Properties of Modern Drugs Acting on the Autonomic Nervous System (A) Sympathomimetics (B) Parasympathomimetics (C) Sympatholytics (D) Parasympatholytics	1	10	2	0
27	Pharmacology of Local Anaesthetics	1		1	0
28	Modern Drugs Acting on CNS (A) Opioid analgesics (B) Sedative and hypnotics	1		2	1
29	Pharmacology of Modern Drugs acting on Cardiovascular and Endocrine System	2		5	2

	(A) Antihypertensives (including diuretics) (B) Anti-anginal drugs (C) Insulin and Oral hypoglycaemics (D) Hormonal Contraceptives (E) Androgens (F) Corticosteroids (G) Thyroid hormones and Anti-thyroid drugs (H) Drugs acting on uterus				
30	Pharmacology of Blood Products and Related Drugs (A) Blood Products (B) Haematinics (C) IV fluids (D) Plasma Expanders	3		1	0
31	Pharmacology of Modern Drugs Acting on GIT (A) Antacids (B) Anti-emetics (C) Drugs for diarrhoea and constipation	3		1	1
32	Pharmacology of Modern Drugs for Allergy and Inflammation (A) Steroidal and Non-steroidal anti-inflammatory drugs (NSAIDs) (B) Antihistamines	3		1	1
33	Drugs for Cough and allergic respiratory disorders.	3		0	1
34	Pharmacology of Modern Antimicrobial Agents (A) General concepts and outline on development of antimicrobial agents and their action (B) Antimicrobial resistance (C) Beta-lactam antibiotics: Penicillins and Cephalosporins (D) Fluoroquinolones (E) Aminoglycosides (F) Antitubercular drugs (G) Antifungal drugs (H) Antimalarial drugs (I) Antiprotozoal drugs (J) Anthelmintic drugs (k) Antiviral drugs	3	6	3	3
Total Marks			100	60 hrs	30 hrs

Table 2 : Contents of Course

Paper 2					
Sr.No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours (Theory)
35	<p>وصف العقاقیر (Wasful Aqāqīr) Pharmacognosy</p> <p>A. تعریف، تاریخی اہمیت، موجودہ ترقی و دائرہ کار (Ta'rif, Tarīkhī Ahmiyat, Mawjūda Taraqqī wa Dā'irakār) Definition, history, current development and scope</p> <p>B. زندہ اجسام کی خصوصیات، تقسیم اور ۵ مملکتی درجات (مونیرا، پروٹسٹا، فنگی، پلانٹی، اینیملیا) (Zinda Ajsām ki Kusūsiyāt, Taqsīm aur 5 Mumlakati Darjāt (Monera, Protista, Fungi, Plantae and Animalia) Attributes of living organism, classification of living organisms, five kingdom of classification (Monera, Protista Fungi, Plantae, and Animalia)</p> <p>C. نباتات کی اقسام کا مختصر تعارف (Nabātāt ki Aqsām ka Mukhtasar Ta'aruf) Classification of plants and brief Introduction i. Algae ii. Bryophytes iii. Pteridophytes iv. Gymnosperm v. Angiosperm</p> <p>D. نباتات: عادات (بوٹی، جھاڑ، بیل و درخت)، جائے وقوع (آبی و بری)، اینوولس، بائی (Nabātāt: 'Adāt (Būtī, Jhār, Bel wa Darakht), Jā'i Waqū' (Ābī wa Barrī), annuals, biennials, perennials) Plant: habit (herb, shrub, climbers, trees), habitat (aquatic and terrestrial), annuals, biennials,</p>	1	16	6	3

	<p>perennials E. مختلف گلدار نباتات کی ہیئت و خصوصیات (Mukhtalif Guldār Nabātāt ki Hīyyat wa Khusūsiyāt) Morphology of different flowering plants i. Root modifications (tap root and adventitious root modifications) ii. Shoot modification of stem, underground stem modification (bulb, corm, rhizome, tuber) with examples iii. Leaf (leaf base, petiole, lamina, stipules), venation, leaf type (simple and compound), modification of leaf, leaf duration (fagacious, deciduous, evergreen). F. جڑ، تنا، پتی اور تخم کی تشریحی خصوصیات (Jar, Tana, Pattī aur Tukhm ki Tashrīhī Khusūsiyāt) Anatomical characteristics of root, stem, leaf and seed.</p>				
36	<p>قومی و بین الاقوامی ادارے برائے امور ادویہ مفردہ (Qawmi wa Bainul Aqwāmi Idāre Barā-i-'Umūr-i-Advia Mufrada) (National and International organizations related to single drugs) National and International Organizations and Ministry of Ayush portals related to Advia Mufrada (Single Drugs) and promotion of Unani system of medicine. (A) National Medicinal Plants Board (NMPB) and cultivation of medicinal plants (B) WHO GCTM (Global Centre for Traditional Medicine) (C) AYUSH research portal (D) NAMASTE portal (E) AYUSH NGO portal (F) e-AUSHADHI (G) e-Charak</p>	1	2	1	1
37	<p>ادویہ نباتیہ (Advia Nabātiyya) Plant Origin Drugs</p>	1	12	15	7

<p>ترتیب لمحاظ اردو حروف تہجی الف-ث</p> <p>(Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī) Arranged according to Urdu Alphabets (<i>Alif to Se</i>)</p> <p>مندرجہ ذیل مفرد ادویہ کا یونانی / طبیبی نام، نباتی نام، مترادف نام، وجہ تسمیہ، عائلہ (قلمی) کہ ماخذ، جائے وقوع، ماہیت و شناخت، طبی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص نباتی اجزاء مؤثرہ، و جدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Botanical names, Alternative names, Nomenclature, Family (Bentham and Hooker Classification System), Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse drug reaction, Corrective measures, Therapeutic interchange, Important formulations, Important phytoconstituents and Recent research information of following single drug:</p> <p>(1) آکھ (Ākh), (2) آلو بالو (Ālu Bālū), (3) آلو بخارہ (Ālū Bukhāra), (4) آملہ (Āmla), (5) آنبہ ہلدی (Āmba Haldī), (6) آبہل (Abhal), (7) آتیس (Atīs), (8) اذراقی (Azārāqī), (9) آرژن (Arjun), (10) ایزخر (Izkhir), (11) آڑوسہ (Adūsa), (12) اسپنغول (Aspaghul), (13) اسپند (Aspand), (14) آسروول (Asrawl), (15) اُسٹو خودوس (Ustukhuddūs), (16) آسگند (Asgand), (17) افتیمون و تخم کشوث (Aftīmūn wa Tukhm Kashūth), (18) آفسنتین (Afsantīn), (19) آنار (Anār), (20) آنجبار (Anjibār), (21) آنجیر (Anjīr), (22) آنیسون (Anīsun), (23) بابچی (Bābchī), (24) بابونہ (Bābuna), (25) بادام شیریں (Bādām Shīrīn), (26) بادرنجبویہ (Bādranjboyā), (27) بادیان (Bādiyān), (28) بارنگ (Bārtang), (29) باو بڑنگ (Bāobadang), (30) بائے کھنہ (Bāyē Khēnā)</p>				
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	<p>(Baekhamba), (31) بَبُول و صَمِغ عَرَبِي (Babūl wa Samagh Arabī), (32) بَرَنْجَاسِف (Branjāsif), (33) بَرَهْمَنْدَانِي (Brahmandandī), (34) بَرَهْمِي (Brahmī), (35) بَرَزَالْبَنْج (Bazrulbanj), (36) بَسْكَهِيْرَا (Biskhaprā), (37) بَلَاؤُر (Balādūr), (38) بَلِيلَه (Balela), (39) بَنْفَشَه (Banafsha), (40) بَهْدَانَه (Behidāna), (41) بَهْرُوزَه (Bahroza), (42) بَهْمَن (Bahman Surkh), (43) بَهْمَن سَفِيْد (Bahman Safed), (44) بَهْوِيْنِ اَمْلَه (Bhuīn Āmla), (45) بِيْدَانْجِيْر (Bedanjīr), (46) بِيْغِيْرِي (Belgirī)</p> <p>پَلَّاسِ پَپْدَه مَعِ گُلِ تِيْسُو و کَر کَس (Parsiyāoshān), (47) پَپْدَه مَعِ گُلِ تِيْسُو و کَر کَس (Palās Pāpda Ma' Gul-i-Tīsu wa Kamarkas), (48) پَنَوَاژ (Panwād), (49) پَنَبَدَانَه (Pambadāna), (50) پُوْدِيْنَه (Podīna)</p> <p>تَهْمُ بَا لَنْگَا (Taj), (52) تَهْمُ بَا لَنْگَا (Taj), (53) تَهْمُ سِرِيْس (Tukhm-i-Siris), (54) تَهْمُ سِرِيْس (Tukhm-i-Siris), (55) تُوْرَب (Turab), (56) تُوْرَب (Turab), (57) تُوْرَبُد (Turbud), (58) تُوْرَبُد (Turbud), (59) تُوْتِ سَفِيْد و سِيَاه (Tūt Safed wa Siyāh), (60) تُوْتِ سَفِيْد و سِيَاه (Tūt Safed wa Siyāh), (61) تُوْتِ سَفِيْد و سِيَاه (Tūt Safed wa Siyāh), (62) تُوْتِ سَفِيْد و سِيَاه (Tūt Safed wa Siyāh)</p> <p>(Thā'lab) ثَعْلَبِ كِيْ مَخْتَلَفِ اَقْسَامِ (62)</p>				
38	<p>ادويه نباتيه (ترتيب بلحاظ حروف تہجی) ج-ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Plant origin drugs (Arranged according to Urdu Alphabet) Jīm-Ze</p> <p>مندرجہ ذیل مفرد ادویہ کا یونانی / لاطینی نام، نباتی نام، مترادف نام، وجہ تسمیہ، عاکلہ (فیملی) لہ ماخذ، جائے وقوع، ماہیت و شناخت، طبعی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر</p>	2	20	10	5

<p>اثرات، مصلح، بدل، مشہور مرکبات، مخصوص نباتی اجزاء موثرہ، و جدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Botanical names, Alternative names, Nomenclature, Family (Bentham and Hooker Classification System), Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse drug reaction, Corrective measures, Therapeutic interchange, Important formulations, Important phytoconstituents and Recent research information of following single drug:</p> <p>(63) جامن (Jāmun), (64) جاوتری و جوزبوا (Jāwitrī wa Jawz Buwā), (65) جدوار (Jadwār), (66) جواکھار (Jawākhar), (67) جوزماثل (Jawz Māthil)</p> <p>(68) چاکسو (Chāksū), (69) چرائتہ تلخ و شیریں (Chirā'ita Talkh wa Shīrīn), (70) چوب چینی (Chob Chīnī), (71) چوب زرد (Chob Zard)</p> <p>(72) حبّ الآس (Ḥabbul Ās), (73) حبّ القرطم (Ḥabbul Qurtum), (74) حبّ القلت (Ḥabbul Qilt), (75) حلبہ (Ḥulba), (76) حلتیت (Ḥiltīt), (77) حناء (Ḥina), (78) حنظل (Ḥanzal)</p> <p>(79) خاکی (Khāksī), (80) خبازی (Khubāzī), (81) خرپہ (Kharpaza), (82) خردل (Khardal), (83) خرفہ (Khurfa), (84) تخم خشکاش (Tukhm-i-Khashkhāsh), (85) خٹمی (Khitmī), (86) خولجان (Khulanjān), (87) خیار (Khiyār), (88) خیارین (Khiyārain)</p> <p>(89) دارچینی (Dārchinī), (90) دارِ فانیل و فلفلمویہ (Dār-i-Filfil wa Filfilmoya), (91) درمنہ ترکی (Dirmina Turkī), (92)</p>				
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	<p>(Dudhi Khurd wa Kalan) دودھی خوردو کلاں</p> <p>ریوند چینی (94), ریحان (93), ریٹھا (93) (Raihān), (Rītha), (Rewand Chinī), (Rāl Safed) رال سفید (95)</p> <p>زرشک مع رسوت و داربلد (96) (Zarishk Ma' Rasaut wa Dār-i-hald), زراوند مدحرج (98) (Zarambād), زرنباد (97) (Zarāwand Mudḥaraj), زعفران (99) (Za'farān), زنجبیل (102) (Zanjabīl), زوفایابس (101) (ZūfaYābis), زیرہ سیاہ (104) (Zīra Safed), زیرہ سفید (103) (Zaitūn), (Zīra Siyāh)</p>				
39	<p>ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>مندرجہ ذیل مفرد ادویہ کا یونانی / طبیبی نام، نباتی نام، مترادف نام، وجہ تسمیہ، عائلہ (فیبلی) ماخذ، جائے وقوع، ماہیت و شناخت، طبی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص نباتی اجزاء مؤثرہ، و جدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Botanical names, Alternative names, Nomenclature, Family (Bentham and Hooker Classification System), Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse Drug Reaction, Corrective measures, Therapeutic interchange, Important formulations, Important phytoconstituents and Recent research information of following single drug:</p>	2	20	10	5

<p>(105) ساؤج ہندی (Sāzaj Hindī), (106) سپستان (Sapistān), (107) ستاور (Satāwar), (108) سُدَّاب (Suddāb), (109) سدا (110) سَدَابھَار (Sadābahār), (111) سَر پھوکھ (Sarphūka), (112) سَقْمُونِیَا (Saqmoniya), (113) سَعْد کوفی (So'd Kūfi), (114) سَنَاء (Sanā'), (115) سُمْبُلُطِّیب (Sumbulutṭīb), (116) سَمْبھَالُو (Sambhālū), (117) سَنگھَاڑَا (Singhāda), (118) سُوْر نجان شیریں و تلخ (Sūranjān Shīrīn wa Talkh), (119) سَھجَنہ (Sahjana)</p> <p>(120) شَاہتْرہ (Shāhetra), (121) شِببَت (Shibbat), (122) شِیْطْرَج ہندی (Shītraj Hindī), (123) شُونِیز (Shonīz)</p> <p>(124) صَبْر (Ṣibr), (125) صَعْتَر فَارسی (So'tar Fārsī), (126) صَمِغِ کَافِیرَا (Samagh-i-Kafīra), (127) صَنْدَل سُرُخ (Sandal Surkh), (128) صَنْدَل سفید (Sandal Safed)</p> <p>(129) طَبَاشِیر (Ṭabāshīr)</p> <p>(130) عَاقِر قَرھا (Aqir Qarha), (131) عَشْبہ مغربی (Ushba Maghrabī), (132) عَنَاب ('Unnāb)</p> <p>(133) فَر فِیُون (Farfiyūn), (134) فَر نَجْمِشْک (Franjmushk), (135) فِلْفِل سفید و سیاہ (Filfil Safed wa Siyāh)</p> <p>(136) قَر نَفْل (Qarnful), (137) قِنْب (Qinnab)</p> <p>(138) کَات سفید (Kāt Safed), (139) کَاسَنی (Kāsni), (140) کَالِی (Kālī), (141) کَاکْرَا سِیْگھی (Kākra Singhī), (142) کَاکْرَا کَالِی زِیرِی (Kālī Ziri), (143) کَاھُو (Kāhū), (144) کَاپھَل (Kāephal), (145) کَبَاب چینی (Kabābchinī), (146) کَبَاب خَنْدَاں (Kababa Khāndān), (147) کَتَاں (Katān), (148) کَر نَجْوہ (Kāknaj), (149) کَر فِلس (Karafs), (150) کَرانجوا (Karanjwa), (151) کِشْنِیز (Kishnīz), (152) کَسِید</p>				
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	(Kamela), (153) کندر (Kundur), (154) کنگھی (Kanghī), (155) کونچ (Konch), (156) کیوڑا (Kewra)				
40	<p>ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ-ہ</p> <p>Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He</p> <p>Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He</p> <p>مندرجہ ذیل مفرد ادویہ کا یونانی / طبیبی نام، نباتی نام، مترادف نام، وجہ تسمیہ، عائلہ (نبیلی) کہہ لیا جائے وقوع، ہائیت و شناخت، طبعی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص نباتی اجزاء مؤثرہ، و جدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Botanical names, Alternative names, Nomenclature, Family (Bentham and Hooker Classification System), Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darjāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse Drug Reaction, Corrective measures, Therapeutic interchange, Important formulations, Important phytoconstituents and Recent research information of following single drug:</p> <p>(157) گاجر (Gājar), (158) گڑ مار بوٹی (Gurmar Būtī), (159) گل گڑبیل (Gul-i-Surkh), (160) گل گڑبیل (Gul-i-Gurhal), (161) گل دھاوا (Gul-i-Dhāwā), (162) گندنا (Gilo), (163) گاؤزبان (Gaozabān), (164) گندنا (Gandana)</p> <p>(165) لوبان (Lobān), (166) لودھ پٹھانی (Lodh Pathānī), (167) لہسن (Lahsun)</p> <p>(168) مازو (Māzū), (169) مالکنگنی (Mālkanganī), (170) مرہٹی (Mā'in Khūrd wa Kalān), (171) مرہٹی (Murmakkī), (172) مروڑ پھلی (Maror-phalī), (173)</p>	2	14	7	3

	<p>(Mastagī), (174) مُقِل (Muqil), (175) مَکوء (Mako), (176) منڈی (Mundī), (177) موصلی سفید و سیاہ (Mūshlī Safed wa Siyāh), (178) مویز (Mawīz)</p> <p>(179) نانخواہ (Nānkhwāh), (180) نیلوفر (Nīlofar), (181) نیم (Nīm)</p> <p>(182) وَج ترکی (Waj Turkī)</p> <p>(183) ہلیہ جات (Halela jāt), (184) ہیل خورد (Hīl Khurd), (185) ہیل کلاں (Hīl Kalān)</p>				
41	<p>ادویہ معدنیہ (Advia Ma‘Daniyya) Mineral Origin Drugs</p> <p>مندرجہ ذیل مفرد ادویہ کا یونانی/طبی نام، انگریزی/سائنسی نام، مترادف نام، وجہ تسمیہ، ماخذ، جائے وقوع، ماہیت و شناخت، طبی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص کیمیاوی و معدنی اجزاء مؤثرہ، وجدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, English/Scientific name, Alternative names, Nomenclature, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse Drug Reaction, Corrective measures, Therapeutic interchange, Important formulations, Important chemical or Mineral constituents and Recent research information of following single drug:</p> <ol style="list-style-type: none"> ابرک سفید و سیاہ (Abrak Safed wa Siyāh) تنگار (Tinkār) حجر الیہود (Hajrul Yahūd) حَبث الحدید (Khabsul Ḥadid) 	3	7	4	2

	<p>5. زہر مہرہ (Zahar Mohra)</p> <p>6. سفیدہ کاشغری (Safeda Kāshghari)</p> <p>7. سنگِ جِراحت (Sang-i-Jarāhat)</p> <p>8. شبِ یمانی (Shibb-i-Yamānī)</p> <p>9. شنگرف (Shangarf)</p> <p>10. شورہ قلمی (Shora Qalmī)</p> <p>11. فولاد (Fawlād)</p> <p>12. قلعی (Qalaī)</p> <p>13. کبریت (Kibrīt)</p> <p>14. گلِ ارمنی (Gil-i-Armanī)</p> <p>15. گلِ سُرخ (Gil-i-Surkh)</p> <p>16. گودنتی (Gau Dantī)</p> <p>17. گلِ ملتانی (Gil-i-Multānī)</p> <p>18. مردار سنگ (Murdār Sang)</p> <p>19. نُقرہ (Nuqra)</p> <p>20. نمک سیاہ (Namak Siyāh)</p> <p>21. نمک سانبھر (Namak Sāmbhar)</p> <p>22. نمک لاہوری (Namak Lāhori)</p> <p>23. نوشادر (Nawshādar)</p> <p>24. ہڑتال (Hartāl)</p> <p>25. ہیرا کسیس (Hīrākasīs)</p>				
42	<p>ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs</p> <p>درج ذیل مفرد ادویہ کا یونانی / طبی نام، سائنسی نام، مترادف نام، وجہ تسمیہ، ماخذ، جائے وقوع، ماہیت و شناخت، طبی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص اجزاء مؤثرہ و جدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Scientific name, Alternative names, Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage,</p>	3	7	4	2

	<p>Shelf life, Dose, Adverse Drug Reaction, Corrective measures, Therapeutic interchange, Important formulations, Important active compounds and Recent research information of following single drug:</p> <ol style="list-style-type: none"> 1. آبِ ریشم (Ābresham) 2. بیر بہوٹی (Bīr Bahūtī) 3. بیضہ مرغ (Bayḍa Murgh) 4. خراطین (Kharātīn) 5. خرمہرہ (Kharmohra) 6. سرطان (Sartān) 7. سنگ سرمایہ (Sang-i-Sare Māhī) 8. صدف (Ṣadaf) 9. عسل (‘Asal) 10. کفِ دَریا (Kaf-i-Dariya) 11. لکھ منسول (Luk-i-Maghsūl) 12. مرجان (Marjān) 13. مروارید (Marwārīd) 14. موم (Mom) 				
43	<p>متفرق یونانی ادویہ مفردہ (Mutafarriq Unani Advia Mufrada) Some more /Miscellaneous Unani Single drugs مندرجہ ذیل مفرد ادویہ کا یونانی /طبی نام، نباتی /سائنسی نام، مترادف نام، وجہ تسمیہ، عائلہ (فیمیلی) نام، ماخذ، جائے وقوع، ماہیت و شناخت، طبی خصوصیات، حصول، مزاج، درجات، افعال، معالجاتی استعمال، ترکیب استعمال، مدت تاثیر، مقدار خوراک، مضر اثرات، مصلح، بدل، مشہور مرکبات، مخصوص نباتی /کیمیائی /معدنی اجزاء، مؤثرہ، وجدید تحقیقات سے متعلق معلومات۔</p> <p>Unani/Tibbi Name, Botanical names/Scientific name, Alternative names, Nomenclature, Family (Bentham and Hooker Classification System), Source, Habitat, Morphological identification, Physical characteristics, Collection, Temperament, Darajāt, Therapeutic indications, Therapeutic administration, Methods of usage, Shelf life, Dose, Adverse Drug Reaction, Corrective measures, Therapeutic interchange,</p>	3	2	3	2

<p>Important formulations, Important phytoconstituents/chemicals/minerals and Recent research information of following single drug:</p> <p>A. Advia Nabatiyya (Plant origin drugs)</p> <p>(1) اسارون (Asārūn)</p> <p>(2) اُشنه (Ushna) (دیگر قسم چھڑیلہ)</p> <p>(3) اَطرِیال (Atrilāl)</p> <p>(4) ایون (Afiyun-Post Khashkhāsh wa Koknār Musallam) (پوست خشخاش و کوکنار مسلم)</p> <p>(5) اِکلیلُ الملک (Iklīlul Malik)</p> <p>(6) آنزروت (Anzarūt)</p> <p>(7) ایرسا ((Īrsa)</p> <p>(8) بِسْفَاجْ (Bisfā'ij)</p> <p>(9) بلوط (Balūt)</p> <p>(10) بوزیدان (Būzīdān)</p> <p>(11) بیدمشک (Bedmushk)</p> <p>(12) بَیش (Bīsh)</p> <p>(13) حَبّ السلاطین (Habbus Salātīn)</p> <p>(14) حَبّ الغار (Habbul Ghār)</p> <p>(15) درونج عقربی (Darūnaj Aqrabī)</p> <p>(16) ترنجبین (Turanjbīn)</p> <p>(17) خرباق (Kharbaq)</p> <p>(18) خزاملی (Khuzāma)</p> <p>(19) دَمُّ الاخوان (Dammul Akhwain)</p> <p>(20) زَرَنَب (Zarnab)</p> <p>(21) غاریقون (Ghāriqun)</p> <p>(22) غافث (Ghāfith)</p> <p>(23) شُکَايْ (Shukā'ī)</p> <p>(24) عود صلیب ('Ud Salīb)</p> <p>(25) عود غرقی ('Ud Gharqī)</p> <p>(26) کُتکی سیاہ (Kutki Siyāh)</p>				
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(27) کنوچہ (Kanocha) (28) مرزنجوش (Marzanjosh) (29) نار جیل دریاہی (Nārjīl Driyā'ī) (30) نکچکنی (Nakchiknī) (31) ہلیون (Halīyūn) B. Advia Ma'daniyya (Mineral origin drugs) (32) زنگار (Zangār) (33) سم الفار (Sammulfār) (34) طلاء (Ṭilā') C. Advia Haywaniyya (Animal origin drugs) (35) جند بیدستر (Jund Bedastar) (36) ریگ مہی (Reg Māhī) (37) سریشم مہی (Saresham Māhī) (38) عنبر ('Ambar) (39) قرن الایل (Qarnul Aiyyal)				
Total Marks		100	60 hrs	30 hrs

Table 3: Learning Objectives (Theory) of Course

Paper 1									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain / sub	D3 Must to know / desirable to know / Nice toknow	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method (Refer Abriviationa)	G3 Assessment	H3 Formative/ summative	I3 Term	J3 Integra tion
Topic 1 علم الادويه كاتعارف (Ilmul Advia ka Ta'āruf) Introduction of Ilmul Advia (Lecture : 1 hours, Non lecture: 1 hours)									
CO1	Define Ilmul Advia and describe scope, historical development of Ilmul Advia.	CC	MK	K	L,L&GD	TH, P-VIVA	F&S	I	
CO1	List important scholars that had an impact on the field.	CC	MK	K	L,L&GD,TH, FC	P-VIVA, PRN, TH, SA	F&S	I	
CO2	Define a drug from Unani literature.	CK	MK	K	L, L&PPT, TH, DIS	P-VIVA,TH, PA	F&S	I	
CO1	Define Kulliyāt-i-Advia	CC	MK	K	L, L&PPT,GD	P-VIVA,TH, PA	F&S	I	
Topic 2 دواء، غذاء و ذوالخاصه: تعريف اور اهميت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance (Lecture : 1 hours, Non lecture: 1 hours)									

CO5	Define Dawā', Ghidhā' and Dhu'l Khāssa and explain their importance	CC	MK	K	L&GD,SDL, TUT	TH, P-VIVA, QZ, PA	F&S	I	
CO5	Define Dawā'-i-Ghidha'i and Ghidhā', Ghidhā'-i-Dawā'i,	CC	MK	K	L&GD,SDL, TUT	TH, P-VIVA, QZ, PA	F&S	I	
CO2	Differentiate Dawā' and Ghidhā'	CAN	MK	KH	L&GD,BL, TUT	P-VIVA,CL- PR,PA,TH	F&S	I	
CO2	Differentiate Dawā', Dawā'-i-Ghidha'i, Ghidhā', Ghidhā'-i-Dawā'i, and Dhu'l Khassa	CAN	MK	KH	L&GD,BL, TUT	P-VIVA,CL- PR,PA,TH	F&S	I	
Topic 3 مآخذ ادوية (Ma'ākhidh Advia) Sources of Drugs (Lecture : 1 hours, Non lecture: 1 hours)									
CO3	Identify and describe the sources of Unani drugs.	CC	MK	KH	L,L&GD,DIS, BS,PL	P-VIVA,PA,TH	F&S	I	
CO3	Illustrate the details of the sources of Unani drugs: Plant, Animal, and Mineral sources	CK	MK	K	L,L&PPT,L_ VC,DIS,PrBL, FV	P-VIVA,RK,TH, POSTER	F&S	I	
CO3	Identify plants used for Unani drug that belongs to the Red list or Banned drugs	CK	MK	K	L,L&GD,L_V C,DIS,BS,	T-OBT,P- VIVA,SA,TH	F&S	I	
Topic 4 مزاج ادوية : تعريف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types (Lecture : 1 hours, Non lecture: 1 hours)									
CO2	Define Mizāj-i-Advia	CK	MK	K	L,L&PPT,L& GD	T-EMI,T-CS,P- VIVA,TH	F&S	I	

CO2	Classify various types of Mizāj-i-Advia	CC	MK	KH	L,L&PPT,BS, D, PBL	P-VIVA,CL- PR,M-CHT,TH,	F&S	I	
CO2	Differentiate Aqsām Ba Lihāz-i-Kayfiyat and Aqsām Ba Lihāz-i-Tarkīb-i-Jawhar-i-Advia	CC	MK	KH	L&PPT,L&G D,DIS, TH	P-VIVA,QZ ,TH	F&S	I	
CO5	Define and describe Darajāt-i-Mizāj	CC	MK	KH	L&PPT,, TH, TPW,	T- EW,P- VIVA,TH	F&S	I	
CO5	Define and interpret Darajāt-i-Mizāj with Sammiyat-i-Advia	CAN	MK	KH	L,L&PPT,L& GD,DIS	T- EW,P- VIVA,TH	F&S	I	H-TQS
CO5	Describe types of Sammi Advia according to affected organs and toxic/adverse effects	CC	MK	KH	L,L&PPT,PL	T- EW,P- VIVA,TH	F&S	I	
CO5	Define Tiryāqāt and explain the mechanism of Tiryāqāt	CC	MK	KH	L,L&PPT,L_ VC,BS,TPW	T- EW,P- VIVA,TH	F&S	I	H-TQS
CO5	Describe the Tiryāqāt of important Sammī Advia and their doses	CAP	MK	KH	TH, DIS,BS,	TH, P-VIVA, T- EW	F&S	I	H-TQS
CO2, CO5	Assess Mizāj-i-Dhāti by using Physical properties.	CAP	MK	KH	L&GD,DIS,B S, TUT	T- EW,P- VIVA,TH	F&S	I	
CO2	Assess Mizāj-i-Arzi of a drug	CAP	MK	KH	L&PPT,L&G D,L_VC,BS,S DL	TH, P-VIVA, T- EW	F&S	I	
<p>Topic 5 تاثيرات ادويه (Ta'thirāt-i-Advia) Effects of the drugs on the body (Lecture : 2 hours, Non lecture: 2 hours)</p>									
CO5	Describe Ta'thirāt-i-Advia	CC	MK	K	L,L&PPT,L& GD,PrBL	T- EW,P- VIVA,TH	F&S	I	

CO5	Enlist the types of Ta'thirat-i-Advia	CC	MK	K	L,L&PPT,L&GD,SDL	T- EW,P-VIVA,TH	F&S	I	
CO5	Illustrate Ta'thirāt-i-Awwaliya with examples.	CC	MK	KH	L,L&PPT,L&GD,BS,PL	T- EW,P-VIVA,TH	F&S	I	
CO5	Describe Ta'thirāt-i-Thaniya with examples	CC	MK	K	L,L&PPT,DIS,BS, TH	T- EW,P-VIVA,TH	F&S	I	
CO5	Distinguish between Ta'thīr Kharjī and Ta'thīr Dakhli of a drug	CC	MK	KH	L&GD,DIS,B S, TUT	T- EW,P-VIVA,TH	F&S	I	
CO5	Enumerate drugs with opposite ta'thīrat	CAP	MK	KH	L,L&PPT,L&GD,BS,TPW,FC,	T- EW,P-VIVA,TH	F&S	I	
CO5	Explain drugs of specific ta'thīr on organs	CC	DK	K	L,L&PPT,L&GD, PBL	T- EW,P-VIVA,PRN,TH	F&S	I	
<p>Topic 6 افعال ادويه بلحاظ کیفیت و نوعیت عمل (Af'āl-i-Advia Balihāz-i-Kayfiyat wa Naw'iyat-i-'Amal) Actions related to Advia according to effect and mechanism of action (Lecture : 5 hours, Non lecture: 3 hours)</p>									
CO6	Explain the concept of Af'āl-i-Advia	CK	MK	K	L,L&PPT,L&GD,BS, PL	P-VIVA,QZ,PUZ,TH, DEB	F&S	I	
CO6	Interpret Af'āl-i-Advia in terms of Kayfiyāt	CK	MK	KH	L,L&PPT,L&GD,DIS, PL	CL-PR,M-CHT,M-POS,TH	F&S	I	
CO6	Explain various Af'āl	CK	MK	KH	L,L&PPT,L&GD,DIS, TH	T-OBT,P-VIVA,CL-PR,TH	F&S	I	
CO6	Differentiate the similar Af'āl of two or more drugs related to same Kayfiyat	CK	MK	KH	L,L&PPT,L&GD,DIS,BS,I B	P-VIVA,DEB,M-MOD,TH	F&S	I	

CO6	Enlist Af'āl according to individual Kayfiyat	CK	MK	KH	L,L&PPT,L&GD,PrBL	P-VIVA,PUZ,TH	F&S	I	
Topic 7 یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs دواء کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā' ke Ajzā-i-Tarkībī: Fa'āl wa Dīgar Ajzā') Composition of drugs: Active and other constituent (Lecture : 2 hours, Non lecture: 1 hours)									
CO2, CO7	Enlist basic phytoconstituents	CK	DK	K	L&PPT, TUT	T-EMI, WP, OQ	F&S	I	
CO2, CO5	Classify active phytoconstituents	CK	DK	K	L&PPT,TBL,EDU, TUT	TH, OP	F&S	I	
CO2, CO5	Relate various af'āl with different phytoconstituents	CC	DK	K	L&PPT, TPW	TH, P-VIVA, PRN	F&S	I	
Topic 8 ادویہ کی طبعی خصوصیات (Advia kī Taba'ī Khusūsiyāt) Physical properties of drugs (Lecture: 1 hours, Non lecture: 1 hours)									
CO6	Differentiate general and specific physical properties of drugs.	CE	MK	KH	IBL,LRI,DA	TH	F&S	II	
CO6	Illustrate the importance of physical properties of drugs for the assessment of Mizāj	CK	DK	KH	L&PPT,IBL	T-EMI,T- EW	F&S	II	
CO6, CO8	Describe the physical properties of drugs.	CK	MK	K	L&PPT,L&GD,IBL	P-ID,TH	F&S	II	
Topic 9									

<p style="text-align: center;">مختلف نظام جسمانی و اعضاء پر ادویہ مفردہ کے اثرات (Mukhtalif Nizām-i-Jismānī wa A‘da’ par Advia Mufrada ke Atharāt) Effects of Advia Mufrada on different body systems and organs (Lecture: 7 hours, Non lecture: 3 hours)</p>									
CO1, CO6	Explain and interpret various effects of Advia on the nervous system) Brain, Spinal Cord and Nerves	CAP	MK	KH	L&GD,L_VC, CBL,PER	T- EW, PA	F&S	II	V- MOA
CO1, CO6	Describe and interpret the treatment strategy of diseases of Nizām-i-Qalb wa Dawrān-i-Khūn (Effects of drugs on the Cardiovascular System)	CAP	MK	KH	L&PPT,L&G D,CBL	TH, CW	F&S	II	V- MOA
CO2, CO6	Discribe and interpret the mechanism of action of the Unani drug on Respiratory System (Nizām-i-Tanaffus)	CAP	MK	KH	L&PPT,L&G D,CBL,PrBL, PER	TH	F&S	II	V- MOA
CO2, CO6	Discuss and interpret the treatment strategy of diseases of Nizām-i-Hadm (Digestive system).	CAP	MK	KH	L&PPT,L&G D,CBL,SY,PE R	T- EW	F&S	II	V- MOA
CO1, CO6	Describe and analyse use of Advia on Nizām-i-Bawl (Urinary system).	CK	MK	KH	L&PPT,L&G D,CBL,PER	TH	F&S	II	V- MOA
CO1, CO6	Describe and interpret the Pharmacological actions & their Unani mechanism of action on Nizām-i-Tawlīd wa Tanāsul (Reproductive system)	CAP	MK	KH	L&PPT,L&G D,CBL,PER	TH, P-VIVA, T- EW	F&S	II	V- MOA
CO1, CO6	Define various mechanism of action of unani drugs on different A‘dā’ (organs) Hair, Glands, Skin, Eye, Ear, Nose, Throat, Bone, Muscle and Body Metabolism.	CAP	MK	KH	L&PPT,DIS,P rBL,FC,PER	TH, P-VIVA, T- EW	F&S	II	V- MOA
<p>Topic 10 نامعلوم ادویہ کی معلومات کے ذرائع: قیاس و تجربہ (Na Ma‘lūm Advia ki Ma‘lūmāt ke Zarā’i: Qayās wa Tajriba) Principles and methods of drug development in Unani Medicine: Analogy and experimentation.</p>									

(Lecture : 2 hours, Non lecture: 1 hours)									
CO2, CO8	Define and describe Qayās and its role in drug development in Unani medicine	CK	MK	KH	TH, L&GD,DIS	CW, TH	F&S	II	
CO2, CO8	Describe ‘Umūr-i-Qayās (1) Dawā’ Ka Istihala, (2) Dawā’ Kā Rang, (3) Dawa’ ki Bū, (4) Dawā’ Ka Zā’iqa, (5) Dawa’ Kā Qiwām, (6) Dawā’ Kā Wazan, in details	CK	MK	KH	TH, L&GD, DIS	TH, CRP	F&S	II	
CO2	Discuss Tajriba, Sharā’it-i-Tajriba and Muharrikāt-i-Tajriba	CK	MK	KH	L, L&PPT, L&GD, DIS	TH, P-VIVA, T-EW	F&S	II	
CO2	Define importance of experiment	CK	MK	K	L, L&PPT, L&GD, DIS	TH, P-VIVA, T-EW	F&S	II	
CO2	Enlist Stimuli for experiment	CK	MK	KH	L, L&PPT, L&GD, BS, SY	TH, P-VIVA, T-EW	F&S	II	
Topic 11 تھفظ ادویہ وادویہ کی ذخیرہ اندوزی (Tahaffuz-i-Advia wa Advia ki Zakhīra Andozī) Storage and preservation of Unani drugs (Lecture : 1 hours, Non lecture: 0 hours)									
CO3	Describe Tahaffuz-i-Advia, and its importance,	CK	MK	KH	L,L&PPT,L&GD,DIS, RLE	TH, P-VIVA	F&S	III	
CO3	Explain various principles for good preservation of Advia	CK	MK	KH	L,L&PPT,L&GD,DIS, RLE	TH, P-VIVA	F&S	III	
Topic 12 حصول ادویہ (Husūl Advia) Collection of drugs (Lecture : 1 hours, Non lecture: 0 hours)									

CO2, CO3	Describe Husūl-i-Advia and its importance	CK	MK	KH	L,L&GD,RLE	TH, P-VIVA, T- CS	F&S	III	
CO2, CO3	Explain principles for collection of crude drugs	CK	MK	KH	L,L&GD,RLE	TH, P-VIVA, T- CS	F&S	III	
CO2, CO3	Describe the importance of time and place for collection of crude drugs	CK	MK	KH	L,L&GD,RLE	TH, P-VIVA, T- CS	F&S	III	
Topic 13 اعمار ادویہ A'mār-i-Advia (Shelf life of drugs) (Lecture : 1 hours, Non lecture: 0 hours)									
CO3	Define the A'mār-i-Advia	CK	MK	KH	L,L&PPT,	TH, P-VIVA,	F&S	III	
CO3	Explain importance of A'mār-i-Advia	CK	MK	KH	L&GD,DIS	P-VIVA, TH	F&S	III	
CO3	Describe the A'mār-i-Advia of different parts of Advia Nabātiyya, Advia Haywaniyya and Advia Ma'daniyya	CK	MK	KH	L&PPT, GD,DIS	P-VIVA, TH	F&S	III	
Topic 14 ادویہ مفردہ میں ملاوٹ (Advia Mufrada men Milāwat) (Adulteration in Unani single drugs) (Lecture : 1 hours, Non lecture: 1 hours)									
CO3	Describe adulteration in Unani drugs, its types, causes, methods	CK	MK	KH	L,L&PPT,L& GD,L_VC	TH, DEB	F&S	III	
CO3	Explain adulteration of some common drugs, and methods of detection of adulterants	CK	MK	KH	L,L&PPT,TP W,ML, RLE	TH, P-VIVA, CL- PR,TH	F&S	III	
Topic 15 مقدار خوراک کا تعین اور اس کی اہمیت (Miqdār-i-Khūrāq ka Ta'ayyun aur is kī Ahmiyat)									

Dose determination and its importance (Lecture : 1 hours, Non lecture: 0 hours)									
CO2	Describe about Miqdār-i-Khūrāq	CC	MK	KH	L,L&PPT,	TH, P-VIVA	F&S	II	
CO2	Explain the principles for determination of Miqdār-i-Khūrāq and its role in efficacy of drugs	CK	MK	KH	L&GD,BS,TU T	P-VIVA, PRN	F&S	II	
Topic 16 اشكال ادويه (Ashkāl-i-Advia) Dosage forms of drugs (Lecture : 4 hours, Non lecture: 2 hours)									
CO2	Describe various dosage forms and its classification	CK	MK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	H-ISM
CO2	Describe various dosage forms of Jamid ashkal advia	CK	MK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	
CO2	Describe various dosage forms of Neem Jamid / Neem Sayyal ashkal advia	CK	MK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	
CO2	Describe various dosage forms of Sayyal ashkal advia	CK	MK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	
CO2	Describe various dosage forms of Bukhari ashkal advia	CK	MK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	
CO2	Explain basic principles, advantages and disadvantages in cilinical practice of various dosage forms	CK	CK	K	L&PPT,BS,Pr BL, TUT	TH, P-VIVA, O- QZ	F&S	III	
Topic 17 مسالك ادويه (Masālik-i-Advia) Routes of administration of drugs									

<p style="text-align: center;">مختلف مسالک کے فوائد و نقصانات (Mukhtalif Masālik ke Fawā'id wa Nuqsānāt) Advantages and disadvantages of different routes of drug administration (Lecture : 1 hours, Non lecture: 1 hours)</p>									
CO2, CO7	Describe various routes of administration of drugs	CK	MK	K	L&PPT,L_V C , DB, TUT, D	TH, P-VIVA, O- QZ	F&S	I	
CO2, CO7	Explain the advantages and disadvantages of various routes of drug administration	CC	MK	K	L&PPT,TUT	TH, P-VIVA, QZ ,O-QZ	F&S	I	
<p style="text-align: center;">Topic 18 معزرت ادویہ اور ان کے مصلحات (Mazarrat-i-Advia aur unke Muslihat) Adverse effects of drugs and their correctives (Lecture : 1 hours, Non lecture: 0 hours)</p>									
CO5	Describe Mazarrat-i-Advia and Muslihāt	CC	MK	KH	L,L&PPT,L& GD, TUT	TH, P-VIVA, DEB	F&S	II	H- ISM,V- QAN
CO5	Discuss the importance of correctives and its scope in Unani Medicine	CC	MK	KH	L,L&PPT, D	TH, P-VIVA, QUIZ	F&S	II	
<p style="text-align: center;">Topic 19 ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta'aruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine (Lecture : 1 hours, Non lecture: 1 hours)</p>									
CO3	Define the Pharmacovigilance	CK	MK	KH	L,L&PPT,L& GD,BS	TH, P-VIVA, OBT	F&S	III	
CO3	Define the importance of Pharmacovigilance in Ilmul Advia	CK	MK	KH	L,L&PPT,L& GD,BS	TH, P-VIVA, OBT	F&S	III	
CO3	Discuss the scope of Pharmacovigilance in Unani Medicine	CC	MK	KH	L,L&PPT, D	TH, P-VIVA, QUIZ	F&S	II	

<p style="text-align: center;">Topic 20 ابدال ادويه (Abdāl-i-Advia) Therapeutic interchange (Lecture : 1 hours, Non lecture: 0 hours)</p>									
CO6	Define Abdāl-i-Advia, its types, basic principles, its need and importance	CK	MK	KH	L,L&PPT,L&GD,DIS	TH, P-VIVA, T-EW, OBT	F&S	III	
CO6	Define Abdāl-i-Advia, its types, basic principles, its need and importance	CK	MK	KH	L,L&PPT,L&GD,DIS	TH, P-VIVA, T-EW, OBT	F&S	III	
<p style="text-align: center;">Topic 21 تازا و تناقض ادويه (Tazā'id wa Tanāqud-i-Advia) Synergism and drug antagonism (Lecture : 1 hours, Non lecture: 0 hours)</p>									
CO7	Describe Taza'yud-i-Advia, its types and its significance in preparing Nuskha	CC	MK	KH	L,L&PPT,L&GD	TH, QZ	F&S	II	
CO7	Describe Tanāqud-i-Advia, its types and its significance in preparing Nuskha	CC	MK	KH	L,L&PPT,L&GD	TH, QZ	F&S	II	
<p style="text-align: center;">Topic 22 ادويه جديده (Advia Jadīda) Modern Pharmacology (Lecture : 1 hours, Non lecture: 0 hours)</p>									
CO2, CO7	Define Pharmacology as a field of study	CK	MK	K	L&PPT, TH	TH, P-VIVA, QZ	F&S	I	
CO2, CO7	Explain the scientific significance of pharmacology	CC	MK	K	L&PPT, BS	P-VIVA, QZ, TH	F&S	I	
CO2, CO7	Classify Pharmacology into different branches	CAP	MK	K	L&PPT, BL	TH, P-VIVA, T-EMI	F&S	I	

CO2, CO7	Define various terminologies associated with the subject of pharmacology	CK	MK	K	L&PPT, TH	TH, P-VIVA, PRN	F&S	I	
Topic 23 Pharmacokinetics: Drug absorption, distribution, metabolism, excretion, and elimination (ADME) kinetics (Lecture : 2 hours, Non lecture: 0 hours)									
CO2, CO7	Define pharmacokinetics and describe its significance in drug therapy	CC	MK	K	L,L&PPT,	TH, P-VIVA, O- QZ	F&S	I	
CO2, CO7	Explain mechanism of drug absorption, distribution, metabolism and excretion	CC	MK	KH	L,SIM	TH, P-VIVA, T- EMI,PA	F&S	I	
CO2, CO7	Discuss various factors affecting drug absorption, distribution, metabolism and excretion	CC	DK	K	L&PPT,L_VC , SIM	TH, P-VIVA, PRN	F&S	I	
CO2, CO7	Define various quantitative metrics used in pharmacokinetics	CK	NK	K	L&PPT	TH, P-VIVA, T- EMI	F&S	I	
Topic 24 Pharmacodynamics: Mechanism of drug action and factors affecting drug action (Lecture : 2 hours, Non lecture: 0 hours)									
CO2, CO7	Describe various mechanisms of actions of drugs	CK	MK	K	L&PPT,L_VC , GBL	TH, P-VIVA, T- EMI	F&S	I	
CO2, CO7	Summarize the factors affecting drug action	CK	MK	K	L,L&PPT	TH, P-VIVA, PA	F&S	I	
CO2, CO7	Analyze the contrasting features of mechanism of action of modern and Unani drugs	CAN	NK	K	L, WS	TH, P-VIVA, T- EW	F	I	
Topic 25 Important Concepts of Modern Pharmacology (Lecture : 2 hours, Non lecture: 1 hours)									
CO2, CO7	Define various concepts related to pharmacology and pharmacotherapeutics	CK	MK	K	L&PPT, TUT	TH, P-VIVA, PA	F&S	I	

CO2, CO7	Explain their significance esp. with reference to the Unani system of medicine	CC	DK	K	L, TH	TH, P-VIVA, T-EW	F&S	I	
Topic 26 Pharmacological Properties of Modern Drugs (Lecture : 2 hours, Non lecture: 0 hours)									
CO7	Classify various drugs acting through ANS and outline their mechanism of action	CK	MK	K	L&PPT, TUT	TH, P-VIVA, PRN	F&S	I	
CO7	Enlist the therapeutic uses, selected adverse effects and important contraindications of drugs acting on ANS	CK	MK	K	L,L&PPT,L_VC	TH, P-VIVA, PA	F&S	I	
Topic 27 Pharmacology of Local Anaesthetics (Lecture : 1 hours, Non lecture: 0 hours)									
CO7	Describe and classify various drugs used as local anaesthetics	CK	MK	K	L&PPT, TUT	TH, P-VIVA, QZ	F&S	I	
CO7	Explain the mechanism of local anaesthesia	CK	DK	K	L_VC, BL	TH, P-VIVA, INT	F&S	I	
CO7	Enlist the pharmacological use of local anaesthesia, its common precaution and complications	CK	DK	K	L&PPT, BL	TH, P-VIVA, QZ	F&S	I	
Topic 28 Modern Drugs Acting on CNS (Lecture : 2 hours, Non lecture: 1 hours)									
CO2, CO7	Classify Opioid analgesics	CC	MK	K	L&PPT,	TH, P-VIVA, QZ	F&S	I	
CO2, CO7	Explain the mechanism of action, pharmacological uses, pharmacokinetics, important adverse effects and abuse of Opioid analgesics	CC	MK	KH	L&PPT,L_VC	TH, P-VIVA, O-QZ	F&S	I	

CO2, CO7	Describe the classification, pharmacological actions, uses, adverse effects and drug interactions of Sedative and Hypnotic drugs	CK	MK	K	L&PPT,L_VC	TH, P-VIVA, PA	F&S	I	
Topic 29 Pharmacology of Modern Drugs acting on Cardiovascular and Endocrine System (Lecture : 5 hours, Non lecture: 2 hours)									
CO2, CO7	Classify various drugs used in the treatment of hypertension	CK	MK	K	L&PPT	TH, P-VIVA, INT	F&S	II	
CO2, CO7	Explain the mechanism of action, pharmacokinetics, pharmacological uses, contraindications, drug interactions and special precautions of antihypertensive agents	CC	MK	KH	L&PPT,L_VC	TH, P-VIVA, QZ	F&S	II	
CO2, CO7	Outline the clinical basis for antihypertensive therapy as per national and international guidelines	CC	NK	KH	L&PPT,DIS, PL	TH, P-VIVA, T- EW,INT	F	II	
CO2, CO7	Describe various types of insulin preparations, their specific properties, uses and adverse effects	CK	MK	KH	L&PPT,L_VC	TH, P-VIVA, QZ	F&S	II	
CO2, CO7	Classify oral hypoglycaemic drugs, describe their mechanism of action, pharmacological uses, specific adverse effects, drug interactions and contraindications	CK	MK	KH	L&PPT,L_VC	TH, P-VIVA, T- EW	F&S	II	
CO2, CO7	Explain the guidelines for selection of rational antidiabetic therapy	CAP	NK	KH	L, PL, SDL	TH, P-VIVA, DEB, OBT	F	II	
CO2, CO7	Classify hormonal contraceptives, describe their mechanism, pharmacokinetics, interactions and adverse effects	CK	MK	KH	L,L&PPT	TH, P-VIVA, PA	F&S	II	
CO2, CO7	Describe the choice of hormonal contraceptives therapy based on their actions and complications	CAP	NK	KH	L&GD, TUT	TH, P-VIVA, INT, TH-OBT	F&S	II	

CO2, CO7	Describe the actions of thyroid hormone and outline its use in treatment of thyroid deficiency.	CK	MK	KH	L&PPT,L_VC	TH, P-VIVA, QZ	F&S	II	
CO2, CO7	Classify thyroid inhibitors, describe their mechanism of action, pharmacokinetics & pharmacological uses	CK	MK	KH	L&PPT,L_VC	TH, P-VIVA, QZ	F&S	II	
CO7	Classify uterine relaxants and stimulants and outline their uses and adverse effects	CK	MK	KH	L&PPT	TH, P-VIVA, QZ	F&S	II	
CO7	Describe various androgens used as drugs and enlist their important uses and specific adverse effects	CK	MK	K	L&PPT, TUT	TH, P-VIVA, SA	F&S	II	
CO7	Classify Corticosteroids and explain their mechanism of action and Pharmacokinetics	CC	MK	KH	L,L&PPT, TUT	TH, P-VIVA, T- EW	F&S	II	
CO7	Outline the pharmacological uses, adverse effects and drug interactions of various corticosteroids	CK	MK	KH	L,L&PPT, SDL, PL	TH, P-VIVA, QZ	F&S	II	
Topic 30 Pharmacology of Blood Products and Related Drugs (Lecture : 1 hours, Non lecture: 0 hours)									
CO7	Classify blood products and outline their preparation,uses and precautions	CK	DK	K	SDL, PL	TH, P-VIVA, INT	F&S	III	
CO7	Classify Haematinics and describe their mechanism of action, pharmacokinetics, pharmacological uses and specific adverse effects.	CK	MK	KH	L,L&PPT	TH, P-VIVA, INT	F&S	III	
CO7	Describe various types of IV fluids and enlist their uses	CK	MK	K	L,L&PPT	TH, P-VIVA, INT	F	III	
CO7	Classify plasma expanders, describe their properties and enlist their specific uses.	CK	MK	K	L&PPT	TH, P-VIVA, PA	F	III	
Topic 31 Pharmacology of Modern Drugs Acting on GIT									

(Lecture : 1 hours, Non lecture: 1 hours)									
CO2, CO7	Classify different group of drugs acting on the gastrointestinal tract.	CK	MK	K	L&PPT, TUT	TH, P-VIVA, O-QZ	F&S	III	
CO2, CO7	Discuss the mechanism of action, pharmacological uses and adverse effects of each class of GIT drug	CC	MK	KH	L&PPT,L_VC	TH, P-VIVA, T-EW	F&S	III	
Topic 32 Pharmacology of Modern Drugs for Allergy and Inflammation (Lecture : 1 hour, Non lecture: 1 hours)									
CO2, CO7	Classify drugs for cough, COPD and Bronchial Asthma	CK	MK	K	L,L&PPT	TH, P-VIVA, T-EW	F&S	III	
CO2, CO7	Describe their mechanism of action, contraindications and specific adverse effects of each class	CC	MK	KH	L&PPT,L_VC	TH, P-VIVA, QZ,INT	F&S	III	
CO2, CO7	Explain the emergency treatment of Severe and life-threatening Asthma	CC	NK	KH	L&PPT	TH, P-VIVA, INT	F	III	
Topic 33 Drugs for Cough and allergic respiratory disorders. (Lecture : 0 hours, Non lecture: 1 hours)									
CO7	Classify drugs for cough, COPD and Bronchial Asthma	CK	MK	K	FC	TH, P-VIVA, QZ	F&S	III	
CO7	Describe their mechanism of action, contraindications and specific adverse effects	CC	MK	KH	BL	TH, P-VIVA, O-QZ	F&S	III	
CO7	Explain the emergency treatment of Severe and life-threatening Asthma	CC	DK	KH	BS, TUT	P-VIVA, TH, POS	F	III	
Topic 34 Pharmacology of Modern Antimicrobial Agents (Lecture : 3 hours, Non lecture: 3 hours)									

CO2, CO7	Describe the guiding principles and common terminologies of Anti-microbial therapy	CC	MK	KH	L&PPT	TH, P-VIVA, TH-OBT	F	III	
CO2, CO7	Outline the various methods of antimicrobial resistance and summarize their impact on public health	CK	MK	KH	L&PPT	TH, P-VIVA, T- EW	F&S	III	
CO2, CO7	Classify various antibacterial, antiviral, antifungal, antitubercular, antiprotozoal and antihelminthic drugs.	CK	MK	K	L&PPT,L_VC	TH, P-VIVA, T- EW	F&S	III	
CO2, CO7	Discuss their mechanism of action, pharmacokinetics, pharmacological uses, specific adverse effects and some common interactions	CK	MK	KH	L&PPT,L_VC	TH, P-VIVA, T- EW,PRN	F&S	III	

Table 3: Learning objectives (Theory) of Course

Paper 2									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain / sub	D3 Must to know / desirabl e to know / Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method (Refer abbreviations)	G3 Assessment	H3 Formative/ summative	I3 Ter m	J3 Integration
Topic 35 <i>وصف العقاقير</i> (Wasful Aqāqīr) Pharmacognosy (Lecture : 6 hours, Non lecture: 3 hours)									
CO4	Explain the historical aspects of Advia Mufrada Nabātiyya (plant origin drugs)	CK	MK	KH	L,L&PPT,BS, TH	TH, P-VIVA, PRN	F&S	I	H-IA
CO4	Classify the living organisms on the basis five kingdom of classification	CC	MK	KH	L,DIS, TH	TH, M- CHT,M-POS	F&S	I	
CO4	Enlist the characteristics feature of fungi and lichen.	CK	DK	K	L,L&PPT,DIS, DL	TH, P-VIVA, PRN, POS	F&S	I	
CO4	Classification of plant kingdom	CK	MK	KH	L,L&GD	TH, P-VIVA, CL-PR	F&S	I	
CO4	Describe the general characteristic features of Gymnosperms.	CK	DK	K	L,DIS, FV, DG	TH, P-VIVA, PRN,	F&S	I	
CO4	Explain the salient features of flowering plants (Angiosperms).	CC	MK	KH	L,L&PPT, FV, DG	TH, P-VIVA, CL-PR,SA	F&S	I	

CO4	Explore the parts of the flowering plants and explain the vegetative morphology.	CC	MK	KH	L,L&PPT, DG, FV	TH, P-VIVA, T- EW,PRN	F&S	I	
CO4	Differentiate the stem, root and leaf modifications in plants	CAP	MK	KH	L,DG,FV	TH, P-VIVA, T- EW	F&S	I	
CO4	Identify and differentiate the morphological and anatomical structure of root, stem, leaf and seeds.	CC	MK	KH	L,BS,FC,PER	TH, P-VIVA, CL-PR	F&S	I	
Topic 36 قومی و بین الاقوامی ادارے برائے امور ادویہ مفردہ (Qawmi wa Bainul Aqwāmi Idāre Barā-i-'Umūr-i-Advia Mufrada) (National and International organizations related to single drugs) (Lecture : 1 hours, Non lecture: 1 hours)									
CO5	Enlist primary functions of NMPB	CK	NK	K	L&PPT,BL,M L,SDL	TH, P-VIVA, O-QZ	F&S	I	
CO5	Describe the role of organizations in capacity building of stakeholders	CK	NK	K	L&GD,BL,ML ,SDL	P-VIVA, DEB, TH	F&S	I	
CO5	Describe vision and mission of Ministry of Ayush web portals	CK	NK	K	L&PPT,BL,M L,SDL	TH, P-VIVA, PRN	F&S	I	
CO5	State the portal developed for digitalization of various processes involved in all Central Sector Schemes of the Ministry of Ayush.	CK	NK	K	L&PPT,BL,M L	P-VIVA, PRN, TH	F&S	I	
CO5	Explain the e-charak for sale and purchase of herbal extract, medicinal plant and planting materials	CK	NK	K	L,L&PPT,BL, ML, DEM	TH, P-VIVA,	F&S	I	
CO5	Enlist various research programmes of the Ministry of Ayush	CK	NK	K	L&PPT,BL,M L,SDL	TH, P-VIVA,	F&S	I	
Topic 37 ادویہ نباتیہ									

(Advia Nabātiyya) Plant Origin Drug بمطابق اردو حروف تہجی الف سے ترتیب (Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī) Arranged according to Urdu Alphabets (Alif to Se) (Lecture : 15 hours, Non lecture: 7 hours)									
CO4	Describe Unani/Tibbi and scientific identification of crude drugs	CK	MK	KH	L&PPT, DG	TH, P-VIVA, O-QZ	F&S	I	
CO4	Describe Family (Bentham and Hooker system of classification) of various plant origin drugs	CK	DK	K	L,L&PPT,L&GD, TH	TH, P-VIVA, PRN	F&S	I	
CO4	Explain the morphology of parts of plant origin drugs used in Unani system of medicine	CK	MK	KH	L,L&PPT, TUT	TH, P-VIVA, PRN, O-QZ	F&S	I	
CO4	Describe and differentiate Habitat, method of collection and season of collection of plant origin drugs	CK	MK	KH	L,L&PPT,L&GD, FV, DG	TH, P-VIVA, O-QZ	F&S	I	
CO5	Explain Mizāj and Darajāt of plant origin drugs	CK	MK	KH	DG, L&GD,CBL	TH, P-VIVA, PZ	F&S	I	
CO6	Describe Afʿāl and Nafaʿ- <i>i</i> -Khās and therapeutic indications of Advia Nabātiyya	CC	MK	KH	L,L&PPT,L&GD	TH, P-VIVA, PRN, O-QZ	F&S	I	
CO6	Describe Miqdār- <i>i</i> -Khūrāk, Tarkīb- <i>i</i> -isteʿmāl and important formulations of Advia Nabātiyya	CK	MK	KH	L,L&PPT,L&GD,FC,SY	TH, P-VIVA, PRN, SA	F&S	I	
CO6	Explain adverse effects and corrective measures of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD	TH, P-VIVA, SA, PA	F&S	I	
CO4	Enlist Important Jawhar- <i>i</i> -faʿāl of Advia Nabātiyya	CK	DK	K	L,L&GD,SDL, TUT	TH, P-VIVA, SA, O-QZ	F&S	I	
CO3, CO8	Describe recent research information related to important Advia Nabātiyya	CK	NK	K	L,L&PPT,L&GD,SDL,LS	TH, P-VIVA, O-QZ, OBT	F&S	I	
Topic 38									

ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) جیم-ز

(Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze)
Plant origin drugs (Arranged according to Urdu Alphabet) Jim-Ze
(Lecture : 10 hours, Non lecture: 5 hours)

CO4	Describe Unani/Tibbi and scientific identification of crude drugs	CK	MK	KH	L,L&PPT,L&GD	TH, P-VIVA, PR-I	F&S	II	
CO4	Describe Family (Bentham and Hooker system of classification) of various plant origin drugs	CK	DK	K	L,L&PPT,L&GD, TUT	TH, P-VIVA, PR-I	F&S	II	
CO4	Explain the morphology of parts of plant origin drugs used in Unani system of medicine	CC	MK	KH	L,L&PPT,L&GD,FC,SY	TH, P-VIVA, PRN, PA	F&S	II	
CO4	Describe and differentiate Habitat, method of collection and season of collection of plant origin drugs	CC	MK	KH	L,L&PPT,L&GD	TH, P-VIVA, POS, PRN	F&S	II	
CO5	Explain Mizāj and Darajāt of plant origin drugs	CK	MK	KH	L,L&PPT,L&GD,CBL	TH, P-VIVA, PRN, TH	F&S	II	
CO6	Describe Afʿāl and Nafaʿ- i-Khās and therapeutic indications of Advia Nabātiyya	CK	MK	KH	L,L&PPT,L&GD,CBL	TH, P-VIVA, QZ	F&S	II	
CO6	Describe Miqdār-i-Khūrāk, Tarkīb-i-isteʿmāl and important formulations of Advia Nabātiyya	CK	MK	KH	L,L&PPT,L&GD,FC,SY	TH, P-VIVA, O-GBA	F&S	II	
CO6	Explain adverse effects and corrective measures of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD, TUT	TH, P-VIVA, PRN, TH	F&S	II	
CO4	Enlist Important Jawhar-i-Faʿāl of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD	TH, P-VIVA, OBT	F&S	II	
CO3, CO8	Describe recent research information related to important Advia Nabātiyya	CK	NK	K	L,L&PPT,L&GD,SDL,LS	TH, OBT	F&S	II	

Topic 39

ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک

Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf
Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf

(Lecture : 10 hours, Non lecture: 5 hours)

CO4	Describe Unani/Tibbi and scientific identification of crude drugs	CK	MK	KH	L,L&PPT,L&GD	TH-CS, PRN, PA	F&S	II	
CO4	Describe Family (Bentham and Hooker system of classification) of various plant origin drugs	CK	DK	K	L,L&PPT,L&GD	PA, SA, TH	F&S	II	
CO4	Explain the morphology of parts of plant origin drugs used in Unani system of medicine	CC	MK	KH	L,L&PPT,L&GD,FC,SY,PE R	PRN, TH	F&S	II	
CO4	Describe and differentiate Habitat, method of collection and season of collection of plant origin drugs	CK	MK	KH	L,L&PPT,L&GD, DG	PRN, TH	F&S	II	
CO5	Explain Mizāj and Darajāt of plant origin drugs	CK	MK	KH	L,L&PPT,L&GD, TUT	TH, CW	F&S	II	
CO6	Describe Af'āl and Nafa'-i-Khās and therapeutic indications of Advia Nabātiyya	CC	MK	KH	L,L&PPT,L&GD, DG	TH, PRN	F&S	II	
CO6	Describe Miqdār-i-Khūrāk, Tarkīb-i-iste'māl and important formulations of Advia Nabātiyya	CK	MK	KH	L,L&PPT,L&GD,FC,SY,PER	TH, P-VIVA, PRN, QZ	F&S	II	
CO6	Explain adverse effects and corrective measures of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD, TUT	TH, P-VIVA, PRN, O-QZ	F&S	II	
CO4	Enlist Important Jawhar-i-Fa'āl of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD	PA, SA, TH	F&S	II	
CO3, CO8	Describe recent research information related to important Advia Nabātiyya	CK	NK	K	L,L&PPT,L&GD,SDL,LS	TH, P-VIVA, O-QZ, OBT	F&S	II	
Topic 40									

ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ۔ہ

Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He
Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He

(Lecture : 7 hours, Non lecture: 3 hours)

CO4	Describe Unani/Tibbi and scientific identification of crude drugs	CK	MK	KH	L,L&PPT,L&GD	PA, TEM, TH	F&S	III	
CO4	Describe Family (Bentham and Hooker system of classification) of various plant origin drugs	CK	DK	K	L,L&PPT,L&GD	PRN, TH	F&S	III	
CO4	Explain the morphology of parts of plant origin drugs used in Unani system of medicine	CC	MK	KH	L,L&PPT,L&GD,FC,SY,PE R	TEM, TH	F&S	III	
CO4	Describe and differentiate Habitat, method of collection and season of collection of plant origin drugs	CC	MK	KH	L,L&PPT,L&GD	PA, TEM, TH	F&S	III	
CO5	Explain Mizāj and Darajāt of plant origin drugs	CC	MK	KH	L,L&PPT,L&GD	PA, SA, TH	F&S	III	
CO6	Describe Af'āl and Nafa'-i-Khās and therapeutic indications of Advia Nabātiyya	CK	MK	KH	L,L&PPT,L&GD	TEM, TH	F&S	III	
CO6	Describe Miqdār-i-Khūrāk, Tarkīb-i-iste'māl and important formulations of Advia Nabātiyya	CC	MK	KH	L,L&PPT,L&GD,FC,SY,PER	TEM, SA	F&S	III	
CO6	Explain adverse effects and corrective measures of Advia Nabātiyya	CK	DK	K	L&PPT,L&GD	O-QZ, TH	F&S	III	
CO4	Enlist Important Jawhar-i-Fa'āl of Advia Nabātiyya	CK	DK	K	L,L&PPT,L&GD	TH, P-VIVA, TEM, O-QZ	F&S	III	
CO3, CO8	Describe recent research information related to important Advia Nabātiyya	CK	NK	K	L,L&GD,SDL,LS	TH, P-VIVA, O-QZ, OBT	F&S	III	
Topic 41									

ادوية معدنية (Advia Ma‘Daniyya) Mineral Origin Drugs (Lecture : 4 hours, Non lecture: 2 hours)									
CO4	Describe Unani/Tibbi and Scientific Identification of Crude drugs	CC	MK	KH	L,L&PPT,L&GD,DIS	TH, P-VIVA, PRN, O-QZ	F&S	II	
CO4	Describe physical properties of various mineral origin drugs	CC	MK	KH	L,L&PPT,L&GD,FC,PER	TH, P-VIVA, TEM, QZ	F&S	II	
CO4	Explain Mizāj and Darajāt of Advia Ma’daniyya	CC	MK	KH	L,L&PPT,TH,DIS	PA, TEM, TH	F&S	II	
CO6	Describe Af’āl and Nafa’-i-Khās and therapeutic indications of Advia Ma’daniyya	CC	MK	KH	L,L&PPT,L&GD,DIS, TUT	PA, SA, TH	F&S	II	
CO6	Describe and mention Miqdar-i-Khūrāk, Tarkīb-i-iste’māl and important formulations of Advia Ma’daniyya	CC	MK	KH	L&GD,TUT, D	TEM, TH	F&S	II	
CO6	Explain adverse effects and corrective measures of Advia Ma’daniyya	CC	DK	K	L,L&PPT,L&GD,DIS	TH, P-VIVA, TEM, SA	F&S	II	
CO4	Enlist chemical constituents of Advia Ma’daniyya	CK	NK	K	L,L&PPT,L&GD,DIS	O-QZ, TH	F&S	II	
CO3, CO8	Explain recent research information related to important Advia Ma’daniyya	CK	NK	K	L,L&PPT,SDL,LS	O-QZ, OBT	F&S	II	
Topic 42 ادوية حيوانية (Advia Haywāniyya) Animal Origin Drugs (Lecture : 4 hours, Non lecture: 2 hours)									
CO4	Describe Unani/Tibbi and scientific identification of crude drugs	CK	MK	KH	L,L&PPT,L&GD,DIS	TH, P-VIVA, T- EW, TEM	F&S	II	

CO4	Describe physical properties of various Animal origin drugs	CK	MK	KH	L,L&PPT,L&GD,DIS,FC,PER	T- EW, TH	F&S	II	
CO5	Explain Mizāj and Darajāt of Advia Haywāniyya	CK	MK	KH	L,L&PPT,TH	T- EW, TEM, TH	F&S	II	
CO6	Describe Af'āl , Nafa' -i-Khās, Therapeutic indications and Tarkīb-i-iste'māl of Advia Haywāniyya	CK	MK	KH	L,L&PPT,L&GD,DIS,FC,PER	T- EW, TH	F&S	II	
CO4	Explain important macro/micronutrients & other active components of various Advia Haywāniyya	CK	DK	K	L,L&PPT,L&GD,DIS	T- EW, TH	F&S	II	
CO3	Explain recent research information related to important Advia Haywaniyya	CK	NK	K	L,L&PPT,L&GD,DIS,LS	TH, P-VIVA, O-QZ, OBT	F&S	II	
<p>Topic 43 متفرق یونانی ادویہ مفردہ (Mutafarriq Unani Advia Mufrada) Miscellaneous Unani Single drugs (Lecture : 3 hours, Non lecture: 2 hours)</p>									
CO4	Describe Unani/Tibbi and scientific identification of Advia Mufrada	CK	DK	K	L,L&PPT,L&GD,DIS	PA, TEM, TH	F&S	III	
CO6	Describe physical and organoleptic properties of various mineral origin drugs	CK	DK	K	L,L&PPT,L&GD,DIS,FC,PER	PA, SA, TH	F&S	III	
CO5	Explain Mizāj and Darajāt of Unani Drugs	CK	DK	K	L,L&PPT,L&GD,DIS	TEM, TH	F&S	III	
CO6	Explain Af'āl and Nafa' -i-Khās and therapeutic indications Advia Mufrada	CK	DK	K	L,L&PPT,L&GD,DIS	TEM, TH	F&S	III	
CO4	Explain adverse effects and corrective measures of Advia Mufrada	CK	DK	K	L,L&PPT,L&GD,DIS	PRN, TH	F&S	III	
CO3, CO8	Explain recent research information related to important Advia Mufrada	CC	DK	K	L,L&PPT,L&GD,DIS,SDL,LS	TH, P-VIVA, O-QZ, OBT	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	List of Topics	Term	Hours
1	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-1)	1	18
2	Live demonstration of the salient features of the families (Part-1)	1	5
3	Microscopy of root	1	4
4	Preparation of the Record Book Journal of the crude drugs (Part-1)	1	10
5	Microscopy of stem	1	4
6	Educational tour/field visit/museum visit.	2	6
7	Determination of Mizāj using organoleptic characters.	2	4
8	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-2)	2	15
9	Live demonstration of the salient features of the families (Part-2)	2	5
10	Powder microscopy of crude drugs	2	4
11	Market survey of crude drugs	2	3
12	Preparation of 15 Herbarium of Unani medicinal plants	2	10
13	Preparation of the Record Book Journal of the crude drugs (Part-2)	2	6
14	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus.	3	20
15	Live demonstration of the salient features of the families (Part-3).	3	5
16	Microscopy of leaf	3	4
17	Preparation of the Record Book Journal of crude drugs (Part-3)	3	6
18	Preparation and presentation of poster/chart/PPT/Short videos of following Advia Mufrada	3	6
19	Drug dispensing observation at hospital dispensary	3	5

Table 4: Learning objectives (Practical)

A4 Course out- come	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domai n /sub	D4 Must to know / desirable to know / Nice toknow	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method (Refer Abriviationa)	G4 Assessment	H4 Formative/ summative	I4 Term	K4 Integrat ion
Topic 1									
To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-1)									
CO3, CO8	Demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus.	PSY- GUD	MK	SH	D,DG,PRA	P-EXAM	F&S	I	
Topic 2									
Live demonstration of the salient features of the families (Part-1)									
CO3, CO8	Demonstrate characteristic features of five (5) families; Asteraceae, Labiatae, Malvaceae, Apiaceae, Fabaceae	PSY- GUD	MK	SH	TPW,DG, FV,PRA	P-EXAM	F&S	I	
Topic 3									
Microscopy of root									
CO3, CO8	Demonstrate characteristic features of five (5) families; Asteraceae, Labiatae, Malvaceae, Apiaceae, Fabaceae	PSY- GUD	MK	SH	KL,D, DG,FV	P-EXAM,P- PRF	F&S	I	
CO3,C O8	Demonstrate T.S of dicot and monocot root, stem and leaf	PSY- GUD	MK	SH	KL,D_L, PRA	P-VIVA,P- EXAM	F&S	I	
Topic 4									
Microscopy of stem									
CO3, CO8	Perform Transverse Section (T.S.) of monocot and dicot stem	PSY- GUD	MK	SH	KL,PT	P-VIVA,P- EXAM,P-ID	F&S	II	

Topic 5 Microscopy of leaf									
CO3, CO8	Perform T.S of monocot and dicot leaf	PSY- GUD	MK	SH	KL,PT	PP	F&S	III	
Topic 6 Preparation of the Record Book Journal of the following crude drugs with digital photographs (Part-1)									
CO3, CO8	Prepare the Record Book Journal	PSY- GUD	MK	KH	SDL,PT	RK	F&S	I	
Topic 7 Educational tour/field visit/museum visit.									
CO3, CO8	Observe medicinal plants in situ in herbal garden/medicinal garden/jungles.	PSY- GUD	MK	KH	FV	RK	F&S	II	
CO3, CO8	Observe herbaria/museum/ Recognized Regional/Regional Raw Drug Repositories (RRDR, Ayush)/ Botanical Survey of India (BSI) garden/ Regional Research Centres/Institute of National Importance/National Institute/Deemed Universities/Central Universities along with concerned subject teachers	PSY- GUD	MK	SH	FV	RK	F&S	II	
Topic 8 Determination of Mizāj using organoleptic characters.									
CO3, CO8	Demonstrate the Mizaj of Advia Mufrada using organoleptic characters	PSY- GUD	MK	SH	PT	MC	F&S	I	
Topic 9 To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-2)									
CO3,C O8	Demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus.	PSY- GUD	MK	SH	PT	MC	F&S	II	

Topic 10									
Live demonstration of the salient features of the families (Part-2)									
CO3, CO8	Demonstrate characteristic features of five (5) families; Asteraceae, Labiatae, Malvaceae, Apiaceae, Fabaceae	PSY-GUD	MK	SH	DG,FV,PRA	PRM	F&S	II	
Topic 11									
Powder microscopy of crude drugs									
CO3, CO8	Perform powder microscopy of bark	PSY-GUD	MK	SH	PT	KL	F&S	II	
Topic 12									
Market survey of crude drugs									
CO3, CO8	Observe morphological characters of Advia Mufrada available in local market.	PSY-GUD	MK	SH	LPW,SDL,PT,FV	PI	F&S	II	
Topic 13									
Preparation of 15 Herbarium of Unani medicinal plants									
CO3, CO8	Demonstrate preparation of 15 Herbarium of Unani medicinal plants	PSY-GUD	MK	SH	W,PT	PS	F&S	II	
Topic 14									
Preparation of the Record Book Journal of the following crude drugs with digital photographs (Part-2)									
CO3, CO8	Prepare the Record Book Journal of the crude drugs with digital photographs	PSY-GUD	MK	SH	SDL,PT	RK	F&S	II	
Topic 15									
To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus.									
CO3, CO8	Demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus	PSY-GUD	MK	SH	PT, DEM	PRN	F&S	III	

Topic 16									
Live demonstration of the salient features of the families (Part-3).									
CO3, CO8	Demonstration of the salient features of the families	PSY- GUD	MK	SH	PT,DG,FV	PRN,	F&S	III	
Topic 17									
Preparation of the Record Book Journal of the following crude drugs with digital photographs (Part-3)									
CO3, CO8	Prepare of the Record Book Journal of the crude drugs with digital photographs	PSY- GUD	MK	SH	SDL,KL,PT	RK	F&S	III	
Topic 18									
Preparation and presentation of poster/chart/PPT/Short videos of following <i>Advia Mufrada</i>									
CO3, CO8	Demonstration of poster/chart/PPT/Short videos of <i>Advia Mufrada</i>	PSY- GUD	MK	SH	SDL,KL,PT	PRN	F&S	III	
Topic 19									
Drug dispensing observation at hospital dispensary.									
CO3, CO8	Observe prescription of patients in hospital pharmacy	PSY- GUD	MK	SH	IBL,SDL	SA, PA	F&S	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-1)	1	(1) آکھ (Ākh), (2) آلو باو (Ālu Bālū), (3) آلو بخارہ (Ālū Bukhāra), (4) آملہ (Āmla), (5) آمبہ ہلدی (Āmba Haldī), (6) ارجن (Arjun), (7) آتیس (Atīs), (8) ازاراتی (Azārāqī), (9) اسپنول (Aspagnol), (10) ایزخر (Izkhir), (11) آڑوسہ (Adūsa), (12) اسپند (Aspand), (13) آسروال (Asrawl), (14) آسٹو خودوس (Ustukhuddūs), (15) آسگند (Asgand), (16) آفستین (Aftīmūn wa Tukhm Kashus), (17) آفستین (Afsantīn), (18) آنار (Anār), (19) آنجبار (Anjibār), (20) آنجیر (Anjīr), (21) آنیسون (Anīsun), (22) بادام شیریں و تلخ (Bādām Shīrīn wa talkh), (23) بابونہ (Bābunah), (24) بادرنجبویہ (Bādranjboyah), (25) بادبندنگ (Bādbandang), (26) بادبان (Bādiyān), (27) بارتنگ (Bārtang), (28) بابل و صیغ عربی (Bābūl wa Samagh Arabī), (29) بایکھمبا (Baekhamba), (30) برنجاسف (Branjāsif), (31) برہمڈاندی (Brahmandī), (32) برہمڈاندی (Brahmī), (33) بڑا لہنج (Bazrulbanj), (34) بیکھپرا (Biskhaprā), (35) بلاؤر (Balādūr), (36) بہدانہ (Balela), (37) بنفشہ (Banafsha), (38) بہمان (Behidāna), (39) بہروزہ (Bahroza), (40) بہمن سرخ (Bahman Surkh), (41) بہمن سفید (Bahman Safed), (42) بھوئی آملہ (Bhuī Āmla), (43) بیدانجیر (Bedanjīr), (44) بیگلری (Belgirī), (45) پیلاس پاپدہ مع گل ٹیسو و کمرکس (Parsiyāoshān), (46) پیلاس پاپدہ (Palās Pāpda Ma' Gul-i-Tīsu wa Kamarkas), (47) پنبدانہ (Pambadāna), (48) پنواڑ (Panwād), (49) پودینہ (Podīna), (50) تالمکھانا (Tālmakhāna), (51) تاج (Taj), (52) تخم ہالنگ (Tukhm-i-Bālangā), (53) تخم سیرس (Tukhm-i-Siris), (54) توروب (Turab), (55) توروب (Turbud), (56) تورانج (Turanj), (57) توت سفید و سیاہ (Tūt Safed wa Siyāh), (58) تودری سفید، سرخ، و زرد (Tūdri Safed, Surkh wa Zard), (59) ثعلب کی مختلف اقسام (Thā'lab), (60) (62)	18
2	Live demonstration of the salient features of the families with G tag photograph and maintain file (Part-1)	1	Demonstration of Important Characters and Salient Features of Asteraceae, Labiatae and relating it with the important Unani plants maintained in the herbal garden.	5

3	Microscopy of root	1	i. Transverse Section (T.S.) of dicot root ii. Transverse Section (T.S.) of monocot root	4
4	Microscopy of stem	1	i. Transverse Section (T.S.) of dicot stem ii. Transverse Section (T.S.) of monocot stem	4
5	Microscopy of leaf	3	i. Transverse Section (T.S.) of dicot leaf ii. Transverse Section (T.S.) of monocot leaf	4
6	Preparation of the Record Book Journal of the crude drugs (Part-1)	1	Underground stem modifications e.g. Rhizome: Adrak (<i>Zingiber officinale</i>), Waj (<i>Acorus calamus</i>), Khulanjan (<i>Alpinia galanga</i>), Musli (<i>Chlorophytum borivilianum</i> Tuber) Bulb: Jangli Piyaz (<i>Drimia indica</i>), Onion (<i>Allium cepa</i>) Corm: <i>Colchicum autumnale</i> Underground root modifications: e.g. Radish (<i>Raphanus sativus</i>), Carrot (<i>Daucus carota</i>), Beet-root (<i>Beta vulgaris</i>), Satawar (<i>Asparagus racemosus</i>), Roots: Asgand (<i>Withania somnifera</i>), Asrol (<i>Rauwolfia serpentine</i>), Ushba Hindi (<i>Hemidesmus indicus</i>), Aslus Sus (<i>Glycyrrhiza glabra</i>)	10
7	Educational tour/field visit/museum visit with G tag photograph and maintain file	2	Tour to District/State/National Level Herbal garden/ Recognized Regional Herbarium, Museum/ Regional Raw Drug Repositories (RRDR, Ayush)/ Botanical Survey of India (BSI) garden/ Regional Research Centres/Institute of National Importance /Deemed Universities/Central Universities along with concerned subject teachers to observe live plant and herbarium.	6
8	Determination of Mizāj using organoleptic characters.	2	Demonstrate the Mizāj of plant origin drugs by determining its colour, taste and physical properties	4
9	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus (Part-2)	2	(63) جامُن (Jāmun), (64) جادِ تری و جَوڑوا (Jāwitri wa Jawz Buwā), (65) جدوار (Jadwār), (66) جواکھار (Jawākhar), (67) جَوڑماٹھل (Jawz Māthil) (68) چاکسو (Chāksū), (69) چیرائیتا تلخ و شیریں (Chirā'ita Talkh wa Shīrīn), (70) چوب چینی (Chob Chīnī), (71) چوب زرد (Chob Zard) (72) حَبُّ الآس (Habbul Ās), (73) حَبُّ القُرْطُم (Habbul Qurtum), (74) حَبُّ القِلْت (Habbul Qilt), (75) حَلْب (Hulba), (76) حَلْتِيت (Hiltīt), (77) حِناء (Hina), (78) حَنْظَل (Hanzal) (79) خَرْپَزَه (Khārsī), (80) خُبْزِي (Khubbāzī), (81) خَرْپَزَه (Kharpaza), (82) خردل (Khardal), (83) خُرْفَه (Khurfa), (84) تخم خشکاش (Tukhm-i-Khashkhāsh), (85) خِطْمِي (Khitmī),	15

			(Kishnīz), (152) کَمیلہ (Kamela), (153) کُنْدُر (Kundur), (154) کَنگھی (Kanghī), (155) کونچ (Konch), (156) کیوڑا (Kewra)	
10	Live demonstration of the salient features of the families with G tag photograph and maintain file (Part-2)	2	Demonstration of Important Characters and Salient Features of Malvaceae, Apiaceae and relating it with the important Unani plants maintained in the herbal garden.	5
11	Powder microscopy of crude drugs	2	Perform powder microscopy of Indrajav Talkh, Taj and Darchīnī bark	4
12	Market survey of crude drugs	2	Identify characters, scientific name of any 15 Advia Mufrada available in local market.	3
13	Preparation of 15 Herbarium of Unani medicinal plants	2	Collection, preparation, documentation of field data as per standard format- Botanical Name, Family, Unani Name, habitat, diagnostic characters, place of collection, collected by), mounting of specimen, labeling.	10
14	Preparation of the Record Book Journal of the crude drugs (Part-2)	2	Bark: <i>Terminalia arjuna</i> (Arjun), <i>Holarrhena antidysenterica</i> (Indrajav Talkh), <i>Cinnamomum cassia</i> (Taj), <i>C. zeylanicum</i> (Dārchinī) Leaves: <i>Justicia adhatoda</i> (Arusa), <i>Melia azadirachta</i> (Bakain), <i>Azadirachta indica</i> (Nīm), <i>Centella asiatica</i> (Brahmi) Flower: <i>Punica granatum</i> (Anar), <i>Butea monosperma</i> (Gul-i-Tisu), <i>Hibiscus rosa-sinensis</i> (Gul-i-Gurhal), <i>Rosa damascena</i> (Gul-i-Surkh), <i>Matricaria chamomilla</i> (Gul-i-Babūna) Seed; <i>Malva sylvestris</i> (Tukhm-i-Khubāzī), <i>Psoralea corylifolia</i> (Babchi); <i>Althea officinalis</i> (Tukhm-i-Khitmi), <i>Mucuna pruriens</i> (Konch), <i>Caesalpinia bonducella</i> (Karanjwa), <i>Syzygium cumini</i> (Jāmun)	6
15	To demonstrate the organoleptic characters and morphology of Advia Mufrada mentioned in the syllabus.	3	(157) گَجر (Gājar), (158) گُرْمَار بُوٹی (Gurmar Būtī), (159) گل سُرْخ (Gul-i-Surkh), (160) گل گُرْهال (Gul-i-Gurhal), (161) گل دِھَاوَا (Gul-i-Dhāwā), (162) گِلْوِہ (Gilo), (163) گَاؤزَابَان (Gaozabān), (164) گَنْدَانَا (Gandana) (165) لَوْبَان (Lobān), (166) لَوْدِہ پَٹھَانِي (Lodh Pathānī), (167) لَہْسُن (Lahsun) (168) مَازُو (Māzū), (169) مَالْکَنْگَانِي (Mālkanganī), (170) مَائِن خورْدُو (Mā'in Khūrd wa Kalān), (171) مَرْمَکْکِي (Murmakkī), (172) مَرُوڑ پَھَلِي (Marorphalī), (173) مَصْطَکْکِي (Mastagī), (174) مُنْڈِي (Mundī), (175) مَکُوہ (Mako), (176) مُنْڈِي (Mundī), (177)	20

		<p>موصلی سفید و سیاہ (Mūsli Safed wa Siyāh), (178) مویز (Mawīz)</p> <p>(179) نانخواہ (Nānkhwāh), (180) نیلوفر (Nīlofar), (181) نیم (Nīm)</p> <p>(182) وج ترکی (Waj Turkī)</p> <p>(183) ہلیہ جات (Halela jā), (184) ہیل خورد (Hīl Khurd), (185) ہیل کلاں (Hīl Kalān)</p> <p>ادویہ معدنیہ (Advia Ma'Daniyya) Mineral Origin Drugs</p> <ol style="list-style-type: none"> 1. ابرک سفید و سیاہ (Abrak Safed wa Siyāh) 2. تینکار (Tinkār) 3. حجر الیہود (Hajrul Yahūd) 4. خبث الحدید (Khabsul Hadid) 5. زہر مہرہ (Zahar Mohra) 6. سفیدہ کاشغری (Safeda Kāshghari) 7. سنگ جراثیمت (Sang-i-Jarāhat) 8. شیبہ یمانی (Shibb-i-Yamānī) 9. شنگرف (Shangarf) 10. شورہ قلمی (Shora Qalmī) 11. فولاد (Fawlād) 12. قلعی (Qalaṭ) 13. کبریت (Kibrīt) 14. گل ارمنی (Gil-i-Armanī) 15. گل سُرُخ (Gil-i-Surkh) 16. گوندنی (Gau Dantī) 17. گل ماتانی (Gil-i-Multānī) 18. مردار سنگ (Murdār Sang) 19. نقرہ (Nuqra) 20. نمک سیاہ (Namak Siyāh) 21. نمک سانبھر (Namak Sāmbhar) 22. نمک لاہوری (Namak Lāhori) 	
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			<p>23. نوشادر (Nawshādar)</p> <p>24. ہڑتال (Hartāl)</p> <p>25. ہیراکسیس (Hīrākasīs)</p> <p>ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs</p> <p>1. آبِ ریشم (Ābresham)</p> <p>2. بیر بہوٹی (Bīr Bahūtī)</p> <p>3. بینہ مرغ (Bayda Murgh)</p> <p>4. خراطین (Kharātīn)</p> <p>5. خر مہرہ (Kharmohra)</p> <p>6. سرطان (Sartān)</p> <p>7. سنگِ سرمہی (Sang-i-Sare Māhī)</p> <p>8. صدف (Sadaf)</p> <p>9. عسل (‘Asal)</p> <p>10. کفِ دریہا (Kaf-i-Dariya)</p> <p>11. کسہ مغسول (Luk-i-Maghsūl)</p> <p>12. مرجان (Marjān)</p> <p>13. مروارید (Marwārīd)</p> <p>14. موم (Mom)</p>	
16	Live demonstration of the salient features of the families with G tag photograph and maintain file (Part-3).	3	Demonstration of Important Characters and Salient Features of Fabaceae and relating it with the important Unani plants maintained in the herbal garden.	5
17	Preparation of the Record Book Journal of the crude drugs (Part-3)	3	Fruit: Emblica officinalis- Amla, Strycnos nux-vomica- Kuchla; Terminalia chebula-Halelajat; Tribulus terrestris- Gokhru, Piper nigrum-Kali Mirch	6
18	Preparation and presentation of poster/chart/PPT/Short videos of following Advia Mufrada	3	<p>Prepare poster/chart/PPT/Short videos of</p> <p>i. Nafi'-i-Waja' al-Mafāsīl Advia نافع وجع المفاصل ادویہ</p> <p>ii. Advia Qalbiya Mufrada ادویہ قلبیہ</p> <p>iii. Muqawwi-i-Jigar Advia مقوی جگر ادویہ</p> <p>iv. Muqawwi-i-Dimāgh Advia, مقوی دماغ ادویہ</p> <p>v. Muqawwi-i-Mi'da Advia, مقوی معدہ ادویہ</p> <p>vi. Muqawwi-i-Basar Advia, مقوی بصر ادویہ</p> <p>vii. Mufattit-i-Hasāh Advia, مفتت حصاۃ ادویہ</p> <p>viii. Muqawwi-i-Bāh Advia, مقوی باہ ادویہ</p>	6

			<p>ix. Mudirr-i-Hayd Advia, مدر حیض ادویہ</p> <p>x. Muqawwi-i-Rahim Advia, مقوی رحم ادویہ</p> <p>xi. Muwallid-i-Shīr Advia, مولد شیر ادویہ</p> <p>xii. Muwallid-i-Dam Advia مولد دم ادویہ</p> <p>xiii. Musaffi-i-Khun Advia مصفی خون ادویہ (with figures of single drugs)</p> <p>xiv. Darajāt-i-Mizāj-i-Advia, درجات مزاج ادویہ</p> <p>xv. Shelf -life مدت حیات</p> <p>xvi. Afāl-i-Advia Bali haz-i-Kaifiyat, افعال ادویہ بلحاظ کیفیت</p> <p>xvii. Advia Mufrada men Makhsūs Milāwatī Ajzā', ادویہ مفردہ میں مخصوص ملاوٹی اجزاء</p> <p>xviii. Sammī Advia and their Tiryāqāt, سمی ادویہ اور ان کے تریاقات</p> <p>xix. Advia ke Ajzā'-i-Muwaththira ادویہ کے اجزاء موثرہ</p>	
19	Drug dispensing observation at hospital dispensary.	3	Analyze prescription of Advia Mufrada at hospital dispensary.	5
Total Hrs				140

Activity

CO	Topic name	Activity Details	Hours#
CO1	History of Ilmul Advia	<p>Group Discussion on History of Ilmul Advia</p> <ul style="list-style-type: none"> • Students will be divided in groups. • Each group will present his views contribution of various scholars to the field of Ilmul Advia • Landmarks will be identified by each member of the group. • Discussion will focus on learnings from each landmark period and its current implications • The teacher will mark each student on the basis of knowledge of historical perspectives of Ilmul Advia and his understanding of expertise and contributions of various philosophers and scholars. 	2
CO2	Fundamental Concepts of Ilmul Advia	<p>Quiz</p> <ul style="list-style-type: none"> • Students will be asked to form teams comprising of 4 students/team • Each team will be asked questions about Dawā', Ghidhā' and Dhu'l Khāssa, Ma'ākhidh Advia and Mizāj-i-Advia. • Each Team will be asked 5 questions. • Points will be given for each correct answer • 50% negative marking for each wrong answer will also be implemented. • Each team shall be awarded points for formative assessment based on performance in quiz. • Winning Team shall be rewarded with one extra point. 	3
CO3	Identification of Advia Mufrada	<p>e -Album preparation</p> <ul style="list-style-type: none"> • Student will be divided into group of two students. • Each group will be asked to visit the herbal garden/local market. • Each group will be required to take pictures of atleast 20 herbs. • Each group will have to use these photos to prepare e-Album of plants describing its common name, botanical name, unani name, its method of collection, parts used, adulterants etc. <p>Spotting</p> <ul style="list-style-type: none"> • 15 different plants / plant parts will be students arranged. • Each of it will be assigned a number from 1 to 15. • Each student will be asked to pick a slip containing 4 numbers between 1 and 15. • Each student will then have to identify the plant / plant part placed on the number mentioned in his/her slip. 	6
CO4	Uses of Advia Mufrada	<p>Student-Student Quiz Game</p> <ul style="list-style-type: none"> • Students will be divided into groups of 5. • The Game will be played by two teams at one time. • Each team will have to prepare 10 questions on the uses of drugs. • Both teams will ask these questions to their opponent in alternative manner. • Each Team will get 60 seconds to answer each question • The game will continue for other teams. The winners will play the game with each other till the final winner is selected. 	2

CO5	Mizāj Advia and their Darajāt	<p>e-Poster Preparation</p> <ul style="list-style-type: none"> • Each student will be asked to prepare an e-poster on one plant based drugs (PDF Format) • Students will have to explain its Mizāj Advia and its Darja. • The student will also have to explain various pharmacotherapeutic aspects associated with its Mizāj Advia and its Darja. • The students will be evaluated on the creative quality of the poster, knowledge of subject and communication skills (Layout, elegance, quality to elements presented, way of presentation, and satisfactory answer to the queries raised during the presentation). 	2
CO6	General and specific actions of Advia Mufrada	<p>e-Presentation</p> <ul style="list-style-type: none"> • Each students should be assigned one specific action of Advia Mufrada • Each candidate should be asked to prepare a recorded video presentation on the topic, • The presentation shall contain definition and introduction to the action, drugs which produced this action, their applications in pharmacotherapy. • Each e-presentation shall be part of the student activity portfolio to be presented in the final practical examination. 	2
CO7	Integrated evaluation of modern and Unani drugs	<p>Presentation</p> <ul style="list-style-type: none"> • Each student will be asked to select one modern drug from the syllabus. • He will have to make a presentation comprising of following points: <ul style="list-style-type: none"> ○ Category of modern drug ○ Mechanism of action of modern drug ○ Specific adverse effect of modern drugs ○ Therapeutic equivalent in Unani medicine and its advantages/disadvantages ○ Special precaution in using the selected modern drug with Unani pharmacotherapy 	1
CO8	Project work	<p>Project Work</p> <ul style="list-style-type: none"> • Each student will be given a short term project based identification of major metabolites/ carrying out a systematic literature review/ development of a basic monograph of any one Advia Mufrada • Student will first develop a project plan/procotol • After the protocol has been approved by the concerned subject teacher/expert, the same will be executed by the students under the guidance of one of the subject teacher of the department. • Students shall be encouraged to seek guidance of faculty members from other departments of sciences so as to develop a multidisciplinary approach. • Final report and presentation shall be presented to and evaluated by a subject expert/external expert during final examination. 	6
# Hours indicated are included in calculations of Table 3 and 4			

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	127
2	Lecture with Power point presentation	170
3	Lecture & Group Discussion	112
4	Lecture with Video clips	22
5	Discussions	45
6	Brainstorming	24
7	Inquiry-Based Learning	4
8	PBL	1
9	CBL	10
10	Project-Based Learning	6
11	TBL	1
12	Team project work	4
13	Flipped classroom	19
14	Blended Learning	8
15	Edutainment	1
16	Mobile learning	7
17	Simulation	1
18	Self-directed learning	15
19	Library Session	8
20	Peer learning	2
21	Real life experience	1
22	Symposium	10
23	Tutorial	2
24	Presentations	16
25	Lab report interpretation	1
26	Drug analysis	1
27	Demonstration	1
28	Demonstration Garden	1
29	Field visit	2

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
UNIUG-IA	2	200	100	30	-	20	150	350

6 B - Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.
**** University Examination shall be on entire syllabus**

6 C - Calculation Method for Internal Assessment Marks (20 Marks)

Term	Periodical Assessment*				Term Test**	Term Assessment	
	A	B	C	D	E	F	G
	1 (20)	2 (20)	3 (20)	Average (A+B+C/3) (20)	Term Test (MCQ+SAQ+LAQ and Practical) (Converted to 20)	Sub Total	Term Assessment
First						D+E	D+E /2
Second						D+E	D+E /2
Third					NIL		D
Final IA	Average of Three Term Assessment Marks as Shown in 'G' Column						
	* Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D. Convert it to 20 marks.						
	** Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 20 Marks.						

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)

5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

6 E Question Paper Pattern

II PROFESSIONAL BUMS EXAMINATIONS UNIUG-IA PAPER-1 Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS: All questions compulsory				
		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

II PROFESSIONAL BUMS EXAMINATIONS UNIUG-IA PAPER-II Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS: All questions compulsory				
		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr.No	A List of Topics	B Term	C Mar ks	MCQ (1 Mark)	SA Q (5 Mar ks)	LAQ (10 Mar ks)
1	علم الادویہ کا تعارف (Ilmul Advia ka Ta'aruf) Introduction of Ilmul Advia	1	13	Yes	Yes	Yes
2	دوا، غلام و ذوالخاصہ: تعریف اور اہمیت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance	1		Yes	Yes	Yes
3	ماخذ ادویہ (Ma'akhidh Advia) Sources of Drugs	1		Yes	Yes	Yes
4	تعریف و اقسام: مزاج ادویہ (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types	1		Yes	Yes	Yes
5	تاخیرات ادویہ (Ta'thirāt-i-Advia) Effects of the drugs on the body	1		Yes	Yes	Yes
6	افعال ادویہ بلحاظ کیفیت و نوعیت عمل (Af'āl-i-Advia Balihāz-i-Kayfiyat wa Naw'iyat-i-'Amal) Actions related to Advia according to effect and mechanism of action	1	11	Yes	Yes	Yes
7	یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs دوا کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā' ke Ajzā-i-Tarkībī: Fa'al wa Dīgar Ajzā') Composition of drugs: Active and other constituent	2	10	Yes	Yes	Yes
8	ادویہ کی طبیعی خصوصیات (Advia kī Taba'ī Khusūsiyat) Physical properties of drugs	2		Yes	Yes	Yes
9	مختلف نظام جسمانی و اعضاء پر ادویہ مفردہ کے اثرات (Mukhtalif Nizām-i-Jismānī wa A'da' par Advia Mufrada ke Atharāt)	2	10	Yes	Yes	Yes

	Effects of Advia Mufrada on different body systems and organs					
10	نامعلوم ادویہ کی معلومات کے ذرائع: قیاس و تجربہ (Na Ma'lūm Advia ki Ma'lūmāt ke Zarā'i: Qayās wa Tajriba) Principles and methods of drug development in Unani Medicine: Analogy and experimentation.	2	11	Yes	Yes	Yes
11	تحفظ ادویہ و ادویہ کی ذخیرہ ہائندوزی (Tahaffuz-i-Advia wa Advia ki Zakhīra Andozī) Storage and preservation of Unani drugs	3		Yes	Yes	Yes
12	حصول ادویہ (Husūl Advia) Collection of drugs	3		Yes	Yes	Yes
13	اعمال ادویہ A'mār-i-Advia (Shelf life of drugs)	3		Yes	Yes	Yes
14	ادویہ مفردہ میں ملاوٹ (Advia Mufrada men Milāwat) (Adulteration in Unani single drugs)	3		Yes	Yes	Yes
15	مقدار خوراک کا تعین اور اس کی اہمیت (Miqdār-i-Khūrāq ka Ta'ayyun aur is kī Ahmiyat) Dose determination and its importance	3		Yes	Yes	Yes
16	اشکال ادویہ (Ashkāl-i-Advia) Dosage forms of drugs	3	19	Yes	Yes	Yes
17	مسالک ادویہ (Masālik-i-Advia) Routes of administration of drugs	3		Yes	Yes	Yes
18	معزرت ادویہ اور ان کے مصلحات (Mazarrat-i-Advia aur unke Muslihat) Adverse effects of drugs and their correctives	3		Yes	Yes	Yes
19	ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta'aruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine	3		Yes	Yes	Yes
20	ابدال ادویہ (Abdāl-i-Advia)	3		Yes	Yes	Yes

	Therapeutic interchange					
21	ترانڈوتنا قفس ادویہ (Idāfi, Tazā'id wa Tanāquz-i-Advia) Synergism and drug antagonism	3		Yes	Yes	Yes
22	ادویہ جدیدہ (Advia Jadīda) Modern Pharmacology Definition, Scope, Branches and common terminologies	1		Yes	No	No
23	Pharmacokinetics: Drug absorption, distribution, metabolism, excretion, and elimination (ADME) kinetics	1	10	Yes	Yes	No
24	Pharmacodynamics: Mechanism of drug action and factors affecting drug action	1		Yes	Yes	No
25	Important Concepts of Modern Pharmacology	1		Yes	Yes	Yes
26	Pharmacological Properties of Modern Drugs Acting on the Autonomic Nervous System	1		Yes	No	Yes
27	Pharmacology of Local Anaesthetics	1		Yes	No	Yes
28	Modern Drugs Acting on CNS	1		Yes	No	Yes
29	Pharmacology of Modern Drugs acting on Cardiovascular and Endocrine System	2		Yes	No	Yes
30	Pharmacology of Blood Products and Related Drugs	3	10	Yes	No	Yes
31	Pharmacology of Modern Drugs Acting on GIT	3		Yes	No	Yes
32	Pharmacology of Modern Drugs for Allergy and Inflammation	3		Yes	No	Yes
33	Drugs for Cough and allergic respiratory disorders.	3		Yes	No	Yes
34	Pharmacology of Modern Antimicrobial Agents	3	6	Yes	Yes	No
Total Marks			100			

6 F Distribution of theory examination

Paper 2						
Sr.No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Mark s)
35	وصف العقاقیر (Wasful Aqāqīr) Pharmacognosy	1	16	Yes	Yes	Yes
36	قومی و بین الاقوامی ادارے برائے امور ادویہ مفردہ (Qawmi wa Bainul Aqwāmi Idāre Barā-i-'Umūr-i- Advia Mufrada) National and International organizations related to single drugs	1	2	Yes	No	No
37	ادویہ نباتیہ (Advia Nabātiyya) Plant Origin Drugs ترتیب بلحاظ اردو حروف تہجی الف-ث (Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī) Arranged according to Urdu Alphabets (Alif to Se)	1	12	Yes	Yes	Yes
38	ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی ج-ز Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Plant origin drugs (Arranged according to Urdu Alphabet) Jim-Ze	2	20	Yes	Yes	Yes
39	ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf	2	20	Yes	Yes	Yes
40	ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی گ-ہ Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He	2	14	Yes	Yes	Yes
41	ادویہ معدنیہ (Advia Ma'Daniyya) Mineral Origin Drugs	3	7	Yes	Yes	No
42	ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs	3	7	Yes	Yes	Yes
43	متفرق یونانی ادویہ مفردہ (Mutafarriq Unani Advia Mufrada) Miscellaneous Unani Single drugs	3	2	Yes	No	No
Total Marks			100			

6 G Blue print of paper I & II

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions 20 Questions 1 mark each All compulsory</p> <p>Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ</p>	<ol style="list-style-type: none"> علم الادویہ کا تعارف (Ilmul Advia ka Ta'aruf) Introduction of Ilmul Advia دواء، غذا و ذوالخائضہ: تعریف اور اہمیت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance مآخذ ادویہ (Ma'ākhidh Advia) Sources of Drugs تاثيرات ادویہ (Ta'thīrāt-i-Advia) Effects of the drugs on the body/ مزاج ادویہ: تعریف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types افعال ادویہ بلحاظ کیفیت و نوعیت عمل (Af'āl-i-Advia Balihāz-i-Kayfiyat wa Naw'iyat-i-'Amal) Actions related to Advia according to effect and mechanism of action یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs دواء کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā' ke Ajzā-i-Tarkībī: Fa'āl wa Dīgar Ajzā')Composition of drugs: Active and other constituent یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs دواء کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā' ke Ajzā-i-Tarkībī: Fa'āl wa Dīgar Ajzā')Composition of drugs: Active and other constituent یونانی ادویہ کا سالماتی تجزیہ (Unāni Advia kā Sālmāti Tajziya) Molecular correlation of Unani Drugs دواء کے اجزائے ترکیبی: فعال و دیگر اجزاء (Dawā' ke Ajzā-i-Tarkībī: Fa'āl wa Dīgar Ajzā')Composition of drugs: Active and other constituent

		<p>Composition of drugs: Active and other constituent</p> <p>8. ادویہ کی طبعی خصوصیات (Advia kī Taba‘ī Khusūsiyāt) Physical properties of drugs</p> <p>9. ادویہ کی طبعی خصوصیات (Advia kī Taba‘ī Khusūsiyāt) Physical properties of drugs</p> <p>10. اعمار ادویہ A‘mār-i-Advia (Shelf life of drugs)</p> <p>11. اشکال ادویہ (Ashkāl-i-Advia) Dosage forms of drugs</p> <p>12. مسالک ادویہ (Masālik-i-Advia) Routes of administration of drugs مختلف مسالک کے فوائد و نقصانات Mukhtalif Masālik ke Fawā‘id wa Nuqsānāt (Advantages and disadvantages of different routes of drug administration)</p> <p>13. مضرت ادویہ اور ان کے مصلحات (Mazarrat-i-Advia aur unke Muslihat) Adverse effects of drugs and their correctives</p> <p>14. ابدال ادویہ (Abdāl-i-Advia) Therapeutic interchange / ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta‘āruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine</p> <p>15. ادویہ جدیدہ (Advia Jadīda) Modern Pharmacology Definition, Scope, Branches and common terminologies</p> <p>16. Pharmacokinetics: Drug absorption, distribution, metabolism, excretion, and elimination (ADME) kinetics</p> <p>17. Pharmacodynamics: Mechanism of drug action and factors affecting drug action</p> <p>18. Important Concepts of Modern Pharmacology</p> <p>19. Important Concepts of Modern Pharmacology</p> <p>20. Pharmacology of Modern Antimicrobial Agents</p>
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<p>Q2</p>	<p>Short answer Questions Eight Questions 5 Marks Each All compulsory</p> <p>Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Nice to know</p>	<p>1. تاثیرات ادویہ (Ta'thīrāt-i-Advia) Effects of the drugs on the body / دواء، غذا و ذوالخاصہ: تعریف اور اہمیت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance / علم الادویہ کا تعارف (Ilmul Advia ka Ta'āruf) Introduction of Ilmul Advia / مزاج ادویہ: تعریف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types/ مآخذ ادویہ (Ma'ākhidh Advia) Sources of Drugs</p> <p>2. تاثیرات ادویہ (Ta'thīrāt-i-Advia) Effects of the drugs on the body / دواء، غذا و ذوالخاصہ: تعریف اور اہمیت (Dawā', Ghidhā' and Dhu'l Khāssa: Ta'rīf wa Ahmiyat) Dawā', Ghidhā' and Dhu'l Khāssa: Definition and importance / علم الادویہ کا تعارف (Ilmul Advia ka Ta'āruf) Introduction of Ilmul Advia / مزاج ادویہ: تعریف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types/ مآخذ ادویہ (Ma'ākhidh Advia) Sources of Drugs</p> <p>3. ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta'āruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine / ادویہ کی طبعی خصوصیات (Advia kī Taba'ī Khusūsiyāt) Physical properties of drugs</p> <p>4. تحفظ ادویہ و ادویہ کی ذخیرہ اندوزی (Tahaffuz-i-Advia wa Advia ki Zakhīra Andozī) Storage and preservation of Unani drugs /</p>
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		<p>ادویہ مفردہ میں ملاوٹ (Advia Mufrada men Milāwat) (Adulteration in Unani single drugs) / نامعلوم ادویہ کی معلومات کے ذرائع: قیاس و تجربہ (Na Ma'lūm Advia ki Ma'lūmāt ke Zarā'i: Qayās wa Tajriba) Principles and methods of drug development in Unani Medicine: Analogy and experimentation /</p> <p>اعمار ادویہ A'mār-i-Advia (Shelf life of drugs) /</p> <p>حصول ادویہ (Husūl Advia) Collection of drugs</p> <p>5. تحفظ ادویہ و ادویہ کی ذخیرہ اندوزی (Tahaffuz-i-Advia wa Advia ki Zakhīra Andozī) Storage and preservation of Unani drugs /</p> <p>ادویہ مفردہ میں ملاوٹ (Advia Mufrada men Milāwat) (Adulteration in Unani single drugs) / نامعلوم ادویہ کی معلومات کے ذرائع: قیاس و تجربہ (Na Ma'lūm Advia ki Ma'lūmāt ke Zarā'i: Qayās wa Tajriba) Principles and methods of drug development in Unani Medicine: Analogy and experimentation /</p> <p>اعمار ادویہ A'mār-i-Advia (Shelf life of drugs) /</p> <p>حصول ادویہ (Husūl Advia) Collection of drugs</p> <p>6. ابدال ادویہ (Abdāl-i-Advia) Therapeutic interchange /</p> <p>اشکال ادویہ (Ashkāl-i-Advia) Dosage forms of drugs /</p> <p>مضرّات ادویہ اور ان کے مصلحات (Mazarrat-i-Advia aur unke Muslihat) Adverse effects of drugs and their correctives /</p> <p>تزانہ و تناقض ادویہ (Tazā'id wa Tanāqud-i-Advia) Synergism and drug antagonism /</p> <p>مساکب ادویہ</p>
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		<p>(Masālik-i-Advia) Routes of administration of drugs مختلف مسالک کے فوائد و نقصانات Mukhtalif Masālik ke Fawā'id wa Nuqsānāt (Advantages and disadvantages of different routes of drug administration)</p> <p>7. Important Concepts of Modern Pharmacology /</p> <p>Pharmacokinetics: Drug absorption, distribution, metabolism, excretion, and elimination (ADME) kinetics /</p> <p>Pharmacodynamics: Mechanism of drug action and factors affecting drug action</p> <p>2</p> <p>8. Pharmacology of Modern Antimicrobial Agents</p>
<p>Q3</p>	<p>Long answer Questions Four Questions 10 marks each All compulsory</p> <p>All questions on must know. No Questions on Nice to know and Desirable to know</p>	<p>1. افعال ادویہ بلحاظ کیفیت و نوعیت عمل (Af'āl-i-Advia Balihāz-i-Kayfiyat wa Naw'iyat-i-'Amal) Actions related to Advia according to effect and mechanism of action</p> <p>2. مختلف نظام جسمانی و اعضاء پر ادویہ مفردہ کے اثرات (Mukhtalif Nizām-i-Jismānī wa A'da' par Advia Mufrada ke Atharāt) Effects of Advia Mufrada on different body systems and organs</p> <p>3. ابدال ادویہ (Abdāl-i-Advia) Therapeutic interchange /</p> <p>اشکال ادویہ (Ashkāl-i-Advia) Dosage forms of drugs /</p> <p>تزامن و تناقض ادویہ (Tazā'id wa Tanāqud-i-Advia) Synergism and drug antagonism /</p> <p>مزاج ادویہ : تعریف و اقسام (Mizāj-i-Advia: Ta'rīf wa Aqsām) Temperament of Advia: Definition and types /</p> <p>ادویہ کی نگہداشت کا تعارف اور طب یونانی میں اس کی اہمیت (Advia ki nigahdāsht ka Ta'aruf aur Tib Unani me is ki Ahmiyat) Introduction of Pharmacovigilance and its importance in Unani Medicine /</p> <p>مسالک ادویہ (Masālik-i-Advia) Routes of administration of drugs</p>

		<p>مختلف مسالک کے فوائد و نقصانات Mukhtalif Masālik ke Fawā'id wa Nuqsānāt (Advantages and disadvantages of different routes of drug administration)</p> <p>4. Pharmacology of Local Anaesthetics / Drugs for Cough and allergic respiratory disorders. / Pharmacological Properties of Modern Drugs / Pharmacology of Modern Drugs Acting on GIT / Pharmacology of Modern Drugs acting on Cardiovascular and Endocrine System / Modern Drugs Acting on CNS / Pharmacology of Blood Products and Related Drugs / Pharmacology of Modern Drugs for Allergy and Inflammation</p>
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Paper No:2

Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions 20 Questions 1 mark each All compulsory</p> <p>Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ</p>	<p>1. وصف العقاقیر (Wasful Aqāqīr) Pharmacognosy</p> <p>2. قومی و بین الاقوامی ادارے برائے امور ادویہ مفردہ (Qawmi wa Bainul Aqwāmi Idāre Barā-i-'Umūr-i-Advia Mufrada) (National and International organizations related to single drugs)</p> <p>3. قومی و بین الاقوامی ادارے برائے امور ادویہ مفردہ (Qawmi wa Bainul Aqwāmi Idāre Barā-i-'Umūr-i-Advia Mufrada) (National and International organizations related to single drugs)</p> <p>4. ادویہ نباتیہ (Advia Nabātiyya) Plant Origin Drug ترتیب بلحاظ حروف تہجی الف۔ث (Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī) Arranged according to Urdu Alphabets (Alif to Se)</p> <p>5. ادویہ نباتیہ (Advia Nabātiyya) Plant Origin Drug ترتیب بلحاظ حروف تہجی الف۔ث (Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī)</p>

		<p>Arranged according to Urdu Alphabets (<i>Alif to Se</i>)</p> <p>6. Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze Plant origin drugs (Arranged according to Urdu Alphabet) Jim-Ze</p> <p>7. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) ج-ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Advia Nabatiyya (Arranged according to Urdu Alphabet) Jim-Ze</p> <p>8. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) ج-ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Advia Nabatiyya (Arranged according to Urdu Alphabet) Jim-Ze</p> <p>9. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>10. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>11. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>12. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ-ہ Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He</p> <p>13. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ-ہ Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He</p> <p>14. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ-ہ Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He</p> <p>15. ادویہ معدنیہ (Advia Ma‘Daniyya)</p>
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		<p>Mineral Origin Drugs</p> <p>16. 16. ادویہ معدنیہ (Advia Ma‘Daniyya) Mineral Origin Drugs</p> <p>17. ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs</p> <p>18. ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs</p> <p>19. متفرق یونانی ادویہ مفردہ (Mutafarriq Unani Advia Mufrada) Miscellaneous Unani Single drugs</p> <p>20. متفرق یونانی ادویہ مفردہ (Mutafarriq Unani Advia Mufrada) Miscellaneous Unani Single drugs</p>
<p>Q2</p>	<p>Short answer Questions Eight Questions 5 Marks Each All compulsory</p> <p>Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Nice to know</p>	<p>1. وصف العقاقیر (Wasful Aqāqīr) Pharmacognosy</p> <p>2. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) ج-ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Advia Nabatiyya (Arranged according to Urdu Alphabet) Jim-Ze</p> <p>3. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) ج-ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Advia Nabatiyya (Arranged according to Urdu Alphabet) Jim-Ze</p> <p>4. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>5. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س-ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf</p> <p>6. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ-ہ (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-Ha) Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-Ha</p> <p>7. ادویہ معدنیہ (Advia Ma‘Daniyya) Mineral Origin Drugs</p> <p>8. ادویہ حیوانیہ (Advia Haywāniyya) Animal Origin Drugs</p>

Q3	<p>Long answer Questions Four Questions 10 marks each All compulsory</p> <p>All questions on must know. No Questions on Nice to know and Desirable to know</p>	<ol style="list-style-type: none"> 1. وصف العقاقير (Wasful Aqāqīr) Pharmacognosy 2. ادویہ نباتیہ (Advia Nabātiyya) Plant Origin Drug ترتیب بلحاظ حروف تہجی الف۔ث (Tartīb Ba Lihāz-i-Urdū Hurūf Tahjī) Arranged according to Urdu Alphabets (Alif to Se) 3. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) ج۔ز (Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Jim-Ze) Plant origin drugs (Arranged according to Urdu Alphabet) Jim-Ze 3. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) س۔ک Advia Nabātiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Sin-Kaf Plant origin drugs (Arranged according to Urdu Alphabet) Sin-Kaf / 4. ادویہ نباتیہ (ترتیب بلحاظ حروف تہجی) گ۔ہ Advia Nabatiyya (Tartīb Ba Lihāz-i-Hurūf Tahjī) Gaf-He Plant origin drugs (Arranged according to Urdu Alphabet) Gaf-He
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6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting i. Live plant or its parts (10 marks) ii. Dry parts of the plant (10 marks) iii. Mineral or animal advia (10 marks)	30
2	Performance based component i. Microscopic evaluation of powder (15 marks) ii. Assessment of Mizaj of Advia (15 marks) iii. identification of plant histology slide(s) (15 marks)	45
3	Skill based assessment i. Identify 5 suitable Unani single drugs in clinical senario. ii. Identify and classify drugs according to the Maakhiz (sources) iii. Identify and classify the original and adulterant drugs	15
	Record Book	10
	Viva	30
	Internal Assessment	20
Total Marks		150

References Books/ Resources

S.No	Book	Resources
1	Advia Mufrada	Najibuddin Samarqandi (نجيب الدين سمرقندى-) Raza Library, Rampur
2	Al- Motamad Fi al Advia al Mufrada (المعتمد فى الادويه (المفردة	Yusuf Bin Umar (يوسف بن عمر) Darul Kutub al Ilmiya, Bairut, 2000
3	Al-Qanun fi'l Tib (القانون فى الطب)	Ibn Sina ابن سينا Hamdard Publication, New Delhi, Vol. 02. 1408 Hijri
4	Al-Ubniya En Haqayiq al- Advia (الابنه عن حقائق الادويه)	Abu Mansur al-Harvi (ابو منصور البهروى)، Central Council for Research in Unani Mmedicine, New Delhi
5	Alfaz al-Advia (الفاظ الادويه)	Nooruddin Shirazi (نور الدين شيرازى), Munshi Nawal Kishor, Lucknow , 1887
6	Hallul Mozilāt al-Mushkila fi 'Usul Al-Ilmul Advia (حل المعضلات المشكله فى اصول (علم الادويه	Hakim Abdul Haleem (حكيم عبد الحليم), Matba Faiz Ahmad Bagh, Lucknow , 1927
7	Ikhtiyarat-i-Badi'i (اختيارات بديعى)	Ali Bin Hussain Ansari/ M. Taqi Meer, Shirkat Daruye Bakhsh Razi,Tehran, Iran, 1371
8	Ilmul Advia Nafeesi (علم الادويه نفيسى)	Burhanuddin Nafeesi (برهان الدين نفيسى), M.R.Offset Pres, New Delhi 2007
9	Khazain al-Advia (خزائن (الادويه	Hakim Najmul Ghani (حكيم نجم الغنى), CCRUM
10	Kitab al-Abdal (كتاب الابدال)	Abu Bakar Mohammad bin Zakariya Razi (ابو بكر محمد بن زكريا رازى), CCRUM, New Delhi
11	Kitab al Advia al Mufrada (كتاب الادويه المفردة	Ibn Wafid, Darul Kutub al Ilmiya, Bairut, 2009
12	Kitab al Fatah fi al Tadawa (كتاب الفتح فى التداوى	Abu Saeed Al Maghribi/ Abdul Bari Falahi (ابو سعيد المغربى, عبد البارى), Jamia Hamdard, New Delhi , 2007
13	Kitab al Itimad fi al Advia al Mufrada (كتاب الاعتماد فى الادويه المفردة	Ibn al Jazzar ابن جزار, Al Farooq Islamic heritage Foundation, London, 2019
14	Kitab al Mukhtarat fi al Tib (كتاب المختارات فى الطب	Ibn Hubal al Baghdadi ابن هبل البغدادي CCRUM, New Delhi, 2005 Vol.02
15	Kitab al Saindna fi al Tib (كتاب الصيدنه فى الطب	Abu Reha al Bairuni ابو ریحان البیرونی Hamdard National Foundation, Karachi, 1973
16	Kulliyat al Mufradat (كليات المفردات	Hakim Jameel Khan (حكيم جميل خان) Hindustani Dawa Khana Delhi, ---
17	Makhazin al Taleem (مخازن التعليم	Mohd. Sadiq Ali Khan (حكيم محمد صادق على خان) Matba Farooqi, Delhi, 1323 Hijri
18	Moheet Azam (محيط اعظم	Hakim Azam Khan (حكيم اعظم خان) CCRUM, New Delhi Vol. 1-4
19	Mufradat-e-Azizi (مفردات عزيزى	Hkim Abdul Haleem (حكيم عبد الحليم) CCRUM, New Delhi

20	Riyaz al Adwiya	Yusuf bin Mohammad bin Yusuf (Urdu translation by Bilal Ahmad), CCRUM, New Delhi, 2022
21	Al Shamil fi Sana at-ti-Tibbiya الشامل فى صناعة الطببة	Ala adin (Ibn Nafis) al Qarashi علا الدين ابن نفيس القرشى Cultural Foundation Publication, Abu Dhabi, 2000
22	Tareekh Ilmul Advia تاريخ علم الادويه	Syed Hassan Nigrami سيد حسان نگرامى NCPUL, New Delhi, 2015
23	Tazkira Daud Antaki تذکره داؤد انطاکی	DaudBin Umar Antaki داؤدبن عمر انطاکی Dar al Kutub al Ilmiya, 1998
24	Tohfatul Momeneen تحفة المومنين	Mohammad Momin Husaini محمد بن حسينى Manuscript preserved in Nizamia Tibbiya College, Hyderabad
25	Umda al Tabeeb fi Marifat al Nabat عمدة الطبيب فى معرفة النبات	Abil Khair Ashbeli ابي الخير اشبيلى Darul Gharab al Islami, Bairut , 1995
26	Kitabul hashaihash	Descoridus, Bairut,
27	Al-Jame le Mufradat al Advia wal Aghzia	Ibn Baitar, CCRUM, New Delhi Vol. 1-4
28	Kitabul Aghzia wal Advia	Ishaq Bin Sulaiman, Bairut,
29	Kitabul Motamad Fil Adviatil Mufrada	Yusuf Bin Omer, Bairut,
30	Qarabadin Ibn Tilmeez	Translation by Belal Ahmad, Azra book Traders,
31	Usool Tarkeebul Advia	Najmuddin Samarqandi, Baghdad and New Delhi.
32	Kulliyate Advia	Kabeeruddin M, Hyderabad,
33	Kitabul Kulliyat	Ibn Rushd, CCRUM,
34	Unani Pharmacopeia of India,	Part I (Vol. 1-6), Pharmacopeia commission for Indian Medicine & Homoeopathy, Ministry of Ayush, Government of India.
35	Advia Qalbia	Ibn-e-Sina, Publication division Aligrah, AMU, Aligrah
36	Atlaqi Kulliyat, Zulkifle	National Institute of Unani Medicine, Bangalore.
37	Firdausul Hikmat, Raban Tabri	Idara Kitabul Shaifa, New Delhi
38	Qarabadeen Sarkari	CCRUM, New Delhi
39	Makhzanul Mufradat wa Murakkabat	Munshi Ghulam Nabi, CCRUM, New Delhi
40	Hamdard Pharmacopea,	Hakim Mohammed Said
41	Kamilus sana, Ismail Jurjani	Idara Kitab Al shifts, New Delhi
42	A text book of Single drugs,	Abdul Wadud, Green Foundation Hyderabad,
43	Tazkira Ulil Albab	Daud Antaki, CCRUM, New Delhi
44	Trease and Evans pharmacognosy	WC Evans, WB sounders. Elsevier
45	Pharmacognosy and Phytochemistry	Mohammad Ali, CBS publisher,

46	Introduction to pharmacognosy	IK Sayeed Ahmad, IK International publisher house,
47	Practical Pharmacognosy	CK Kokate, Purohit, Gokhle, Neerali prakashan,
48	Text book of Pharmacognosy	CK Kokate, Purohit, Gokhle, Neerali prakashan,
49	Essential of Pharmacognosy	SH Ansari, Birla publication,
50	Principles of pharmacology	Sharma HL, Sharma KK., Paras Medical Publisher.
51	Lippincott's Illustrated Reviews: Pharmacology	Whalen K., Wolters Kluwer India Pvt Ltd.
52	Rang & Dale's Pharmacology.	Ritter J., Relx India Pvt. Ltd., International Edition 2019
53	Essentials of Medical Pharmacology	Tripathi KD, Jaypee Brothers Medical Publishers.
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55	Hadiqat al Azhar fi mahiyat al ushbwa al uqqar, Arabic	Abul Qasim bin Muhammad, Dar al Gharb al islami, 1990.
56	Unani Research Journals (Urdu and English)	1. Jahan-e-Tib 2. Tarjuman-e-Tib 3. Hippocratic Journal of Unani Medicine 4. Journal of Research in Unani Medicie 5. Unani Medicus 6. Unimed Kulliyat 7. Hamdard Medicus Determination of Temperament of Mufrad (Single) Unani Drugs with the Help of an Inventory Exemplifying Their Organoleptic and Physical Attributes, Hippocratic Journal of Unani Medicine 2013, 8 (4): 11-25 https://ccrum.res.in/writereaddata/UploadFile/Hippocratic8_1306.pdf
57	International Standard Terminologies on Unani Medicine	WHO international standard terminologies on Unani medicine, CCRUM, 2022 ISBN 978-92-4-006495-9 (electronic version) ISBN 978-92-4-006496-6 (print version)
58	Text book of Pharmacognosy	S.H Afaq. Ibn Sina Academy, Aligarh, India
59	Standardisation of Single Drugs of Unani Medicine	CCRUM, New Delhi Vol. 1-5
60	Jahan-e-Tib – Ghiza Number	CCRUM, New Delhi Vol. 10, Issue 2
61	Unani Pharmacopoea of India	CCRUM, New Delhi Part I Vol. 1-6, Part II Vol. 1
62	Unani Medicinal Plants (Various region)	CCRUM, New Delhi
63	National Formulary of Unani Medicine	CCRUM, New Delhi
64	Makhzan-ul-Advia	Noor Karim. Matba Munshi Naval Kishore, Lucknow
65	Glossary of Indian Medicinal Plants	Chopra RN, Nayar SL & Chopra IC. Publications and Information Directorate, CSIR, New Delhi

66	The Wealth of India - A Dictionary of Indian Raw Materials and Industrial Products	Publications and Information Directorate, CSIR, New Delhi (all Volumes)
67	Compendium of Indian Medicinal Plants	Rastogi RP & Mehrotra BN. Central Drug Research Institute, Lucknow and National Institute of Science Communication, New Delhi Vol. I-IV
68	Indian Materia Medica	Nadkarni AK. Bombay Popular Prakashan, Mumbai Vol. I-II
69	Indian Medicinal Plants: An Illustrated Dictionary	Khare CP. Berlin, Springer 2007
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71	Flora of British India	Hooker JD. published by Bishen Singh Mahendra Pal Singh, Dehradun
72	Pharmacographia India – A History of the Principal Drugs	Dymock W, Warden CJH & Hooper D. published by The Institute of Health and Tibbi Research
73	Indian Medicinal Plants	Kirtikar KR& Basu BD. Bishen Singh Mahendra Pal Singh, Dehradun, Vol. I-IV
74	Advia Haiwaniya wa Madaniya	Mohd Afsahul Kalam, Hidayat Publishers & Distributors, New Delhi 2023
75	https://nmpb.nic.in/	
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Abbreviations

Domains

S.No	Short form	Description
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

Teaching Learning Methods

S.No	Short form	Description
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model
26	LS	Library Session

27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	X-Ray	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Assessments

S.No	Short form	Description
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs –
4	T-CRQs	Theory CRQs-
5	T-CS	Theory case study-
6	T-OBT	Theory open book test –
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam

10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz
26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,

40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva