**Appendix-81**
**Resolution No. 27 {27-5}**

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS (PRESCRIBED BY NCISM)

## URDU, ARABIC AND MANTIQ WA FALSAFA
## SUBJECT CODE: UNIUG-UAMF
## URDU, ARABIC, LOGIC AND PHILOSOPHY

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

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

SCAN ME
UNIUG-UAMF

**NCISM**

**I professional BUMS**

Subject Code: **UNIUG-UAMF**

**Urdu, Arabic and Mantiq wa Falsafa**

## KEY POINTS

| **Total number of Teaching hours: 270** | | | |
|---|---|---|---|
| **Lecture hours (LH) – Theory** | | **90 Hours** | **90 Hours (LH)** |
| Paper I (Urdu-30 + Arabic-30) | 60 Hours | | |
| Paper II | 30 Hours | | |
| **Non-Lecture hours (NLH) – Theory** | | **180 Hours** | **180 Hours (NLH)** |
| Paper I (Urdu-60 + Arabic-60) | 120 Hours | | |
| Paper II | 60 Hours | | |
| **Non-Lecture hours (NLH) – Practical** | | **NA** | |

| **Examination (Papers & Mark Distribution)** | | | | | |
|---|---|---|---|---|---|
| **Item** | **Theory Component Marks** | **Practical Component Marks** | | | |
| | | **Practical** | **Viva** | **Elective** | **IA** |
| **Paper I** | **(Urdu-50 + Arabic-50) 100** | **--** | **30** | **--** | **20** |
| **Paper II** | **100** | | | | |
| **Sub-Total** | **200** | **50** | | | |
| **Total marks** | **250** | | | | |

# Preface

This subject has 2 papers: ‘Paper I’ consists of Urdu and Arabic languages, whereas ‘Paper II’ comprises a combination of four subjects, which are *Mantiq*, *Falsafa*, *Hai'at* and *Ilm-un-Nafs*. Most of the classical texts of *Unani Tibb* are in Urdu and Arabic languages and characterized with a logical and philosophical approach. Therefore, the students need to learn Urdu and Arabic languages to get better understanding of *Tibb* and its terminologies, similarly, *Mantiq, Falsafa, Hai'at and Ilm-un-Nafs* (Logic, Philosophy, Astronomy and Psychology) are also very essential for them to understand the philosophical basis of *Unani Tibb* and its principal concepts. The Urdu language is a prerequisite for the entire Unani course, as texts of most of the subjects of Unani medicine are either in Urdu, or Persian or Arabic only. Furthermore, its knowledge is also very supportive for learning Arabic, as it includes all its alphabets,its script and a big number of its vocabulary.

This competency-based curriculum is designed and framed in such a way that, in a short span of time the students will learn the basics of the Urdu and Arabic languages and Greek Logic and Philosophy, and will be able to read the various important classical texts with right pronunciation and better understanding of all Urdu and Arabic terms related to *Unani Tibb*, in addition to understanding its logical and philosophical methods. Apart from the completely new framing of the curriculum, based on competency, some important topics like *Abwab-e-Thulathi Mazeed, Rubaai Mujarrad wa Mazeed, Isme Mubalgha and Tasgheer* have also been added to the Arabic Syllabus. This is because understanding of many *Tibbi* terms depends upon the study of these topics, which were lacking in the previous syllabus. A very interesting and good addition is of *Tibbi Ash’aar* (verses of Unani *Tibb*), this will not only make the students more attached to the ethos of Arabic language, but will also help in memorizing the principals of Unani *Tibb*.Now the syllabus is more comprehensive, covering almost all necessary aspects of the Urdu, Arabiclanguages and Unani philosophy.

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**First BUMS:**

**Course Code and Names of Course**

| | Course Code | Name of Course |
|---|---|---|
| | UNIUG-UAMF | Urdu, Arabic and Mantiq wa Falsafa<br>(Urdu, Arabic, Logic and Philosophy) |
| | | |

## Table 1- Course outcomes and matched Program outcomes

| SR1 CO No | A1<br>Course Outcome (CO) UNIUG-UAMF<br>At the end of the course UNIUG-UAMF, the student should be able to- | B1<br>Course Outcome matched with Program Outcomes. |
|---|---|---|
| 1 | **(Urdu & Arabic)**<br>Recognize, read and write Urdu and Arabic words and numbers with their types and meanings, frame small sentences related to body parts, diseases, medical instruments and drugs. | PO1, PO5 |
| 2 | Demonstrate remarkable linguistic skills while dealing with Urdu books of Unani course.Understand and describe Urdu and Arabic *Tibbi* terms used in different subjects of Unani Medicine, analyze their root words and their other derivatives, and use them properly with their correct spelling and pronunciation. | PO1, PO5 |
| 3 | Demonstrate capability of accessing Urdu and Arabic dictionaries and *Tibbi* glossaries. | PO1, PO5 |
| 4 | Translate short Urdu and Arabic medical texts into English/own language. | PO1, PO5 |
| 5 | **(Mantiq/Logic)**<br>Analyze and explain the logical composition of each definition in various subjects they study under medical education, and create their own definitions of new things. | PO1, PO3 |
| 6 | Apply logical argumentation rules while explaining classical Unani texts. | PO1, PO2, PO3 |
| 7 | Demonstrate logical approach and rational thinking in diagnosing diseases. | PO3, PO1 |
| 8 | **(Falsafa/Philosophy)**<br>Explain the classification of sciences in the ancient Greek Philosophy. | PO1 |
| 9 | Identify and explain the old philosophical concepts on which Unani Medicine is based regarding human beings and the surrounding universe. | PO1 |
| 10 | Compare the old philosophical interpretation of nature and its phenomena to that of modern science, which help them conceptually understand various topics of Unani Medicine. | PO1, PO8 |
| 11 | **(Hai'at/Astronomy)**<br>Identify and understand astronomical terms used in different subjects of Unani Medicine. | PO1, PO2 |
| 12 | Analyze various astronomical factors that are supposed to be having impacts on human health while diagnosing diseases as well as prescribing medications. | PO1,PO2 |
| 13 | **(Ilmun-Nafs/Psychology)**<br>Explain the concept of *Nafs* in Unani Medicine and its importance in understanding of diseases. | PO1, PO2 |

**Table 2: Contents of Urdu, Arabic and Mantiq wa Falsafa – (Paper I - Urdu and Arabic)**

| | A2<br>List of Topics UNIUG-UAMF | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| | **Part A: Urdu** | | | | |
| **1** | حروف تہجی، حروف کی مفرد اور مرکب شکلیں، حروف کی ابتدائی، درمیانی اور آخری شکلیں، ہکاری شکلیں، ہم صوت حروف، مصوتے اور مصمتے، حروف کی اقسام۔ ربط، عطف، تخصیص، فجائیہ، واو معدولہ، واو عطف، کھڑا الف، الف مقصورہ، الف ممدودہ، الف وصل۔<br>اعراب، تنوین، تشدید، مد، حرف جزا، حرف شرط، حرف استثناء۔<br>Huroof-e- Tahajji, Huroof ki Mufrad aur Murakkab Shaklen, Huroof ki Ibtidai, darmiyani aur Akhri Shaklen, Hakari shaklen, Ham Saut Huroof, Musawwate aur musammate, Huroof ki Aqsaam-Rabt, Atf, Takhsees, Fujaiyyah, Waw Madoola, waw Atf, Khada Alif, Alif Maqsoora, Alif Mamdooda Alif wasl. Erab, Tanween, Tashdeed, Mad, Harfe Jaza, Harfe Shart, Harfe Istisna. | I | 0 | 4 | 8 |
| **2** | لفظ (کلمہ)، مادہ، اشتقاق، دو حرفی لفظ، سہ حرفی لفظ، چہار حرفی لفظ، اسم اور اس کی قسمیں۔ فعل اور اس کی حالتیں۔ ضمیر اور اس کی قسمیں۔ صفت اور اس کی قسمیں۔ قواعد:<br>1-مفرد لفظ (Simple word) 2-پیچیدہ لفظ (Complex word) 3-مرکب الفاظ (Compound words) ترادفی مرکب، مرکبات ربطی، مرکبات توصیفی، مرکبات اعدادی 4-تابع مہمل 5-اضافت 6-تثنیہ–واحد/جمع 7-تذکیر وتانیث (جنس) 8-اضداد 9-سابقے اور لاحقے۔<br>Lafz (Kalma)- Maddah – Ishtiqaq – Do Harfi Lfz, She Harfi Lafz, Chahaar Harfi Lfz- Ism aur Uski Qismen- Fe'l aur uski Halaten- Zameer aur uski Qismen- Sifat aur uski Qismen. Qawaid: Mufrad Lafz- Pecheeda Lafz-Murakkab Lafz- Taradufi Murakkab, Murakkabate Rabti, Murakkabate Tauseefi, Murakkabate Adadi- Tabe Muhmal, Izafat, Tasniya, Wahid/Jama, Tazkeer wa Tanees (Jins), Azdaad, Sabqe aur Laheqe. | I | 5 | 4 | 8 |

| | | | | | |
|---|---|---|---|---|---|
| **3.** | مستقل الفاظ کی قسمیں: 1-اسم 2-صفت 3-ضمیر 4-فعل 5-تمیز-<br>اسم کی اقسام: 1-اسم خاص 2-اسم عام<br>اسم عام کی اقسام: 1-اسم کیفیت 2-اسم جمع 3-اسم ظرف 4-اسم آلہ<br>صفت کی اقسام: 1-صفت ذاتی 2-صففت نسبتی 3-صفت عددی 4-صفت مقداری 5-صفت ضمیری<br>ضمیر کی اقسام: 1- شخصی 2-موصولہ 3-استفہامیہ 4-اشارہ 5- تنکیر<br>Mustaqil Alfaaz ki qismen: Ism, Sifat, Zameer, Fe'l, Tameez, Ism ki Aqsaam: Ism Khas, Ism Aam, Ism Aam ki Aqsaam: Ism kifiyat, Ism Jama, Isme Zarf, Ism Aala, Sifat ki Aqsaam : Sifat Zati, Safat Nisbti, Sifat Adadi, Sifat Miqdaari, Sifat Zameeri, Zameer ki Aqsaam: Shakhsi, Mausoola, istifhamiya, Ishara, Tankeer. | I | 5 | 4 | 8 |
| **4.** | فعل کے زمانے: 1-ماضی 2-حال 3- مستقبل<br>معنی کے اعتبار سے فعل کی حالتیں: 1-لازم 2-متعدی 3-ناقص<br>فعل کی صورتیں: 1- خبری 2-شرطی 3-احتمالی 4-امری 5-مصدری<br>فعل کے صیغے: 1-غائب 2-حاضر 3-متکلم<br>افعال ماضی کی اقسام: ماضی مطلق، ماضی ناتمام، ماضی تمام، ماضی شرطیہ، ماضی تمنائی، ماضی احتمالی<br>افعال حال کی اقسام: مضارع، امر، حال مطلق، حال ناتمام، حال احتمالی<br>افعال مستقبل کی اقسام: مستقبل مطلق، مستقبل مدامی۔<br>غیر مستقل الفاظ کی قسمیں: 1-ربط 2-عطف 3- تخصیص 4-فجائیہ<br>Fe'l ke Zamane: Mazi, Hal, Mustaqbil,Fe'l ki Halaten Mana ke Etebar se:lazim, Muta'addi, Naqis,Fe'l ki Surten: Khabari, Sharti, Ehtemali, Amri and Masdari, Fe'l ke Seghe: Ghaib, Hazir, Mutakallim, Afaal Mazi ki Aqsaam: Mazi Mutlaq, Mazi Natamaam, Mazi Tamaam, Mazi Shartiya, Mazi Tamannai, Mazi Ehtemali, Afaal Hal ki Aqsaam: Muzare, Amr, Hal Mutlaq, Hal Natamaam, Hal Ehtemali, Aafaal Mustaqbil ki Aqsaam: Mustaqbil Mutlaq, Mustaqbil Madaami.<br>Ghair Mustaqil Alfaaz ki Qismen: Rabt, Atf, Takhsees, Fujaiyah. | I | 5 | 4 | 08 |

| | | | | | |
|---|---|---|---|---|---|
| **5.** | جملہ:<br>1-مفرد جملہ: مبتدا، خبر، فعل ربط<br>2-مرکب جملہ: ہم رتبہ جملہ، تابع جملہ، استدراکی جملہ، تردیدی جملہ<br>علامات: اوقاف یا وقفہ، سکتہ، رابطہ، تفصیلہ، ختمہ، سوالیہ، فجائیہ یا ندائیہ، قوسین، خط، واوین، زنجیرہ۔<br>Jumla: Mufrad Jumla- Mubtada, Khabar, Fe'le Rabt.<br>Murakkab Jumla: Ham Rutba Jumla, Tabe Jumla, Istidraki Jumla, Tardeedi Jumla,<br>Alaamaat: Auqaaf ya Waqfa, Sakta, Waqfa, Rabta, Tafseela, Khatma, Sawalia, Fujaiya, ya Nidaiya, Qousain, Khat, Wawain, Zanjeerah. | I | 10 | 5 | 10 |
| **6.** | نظم ونثر کے چند منتخب ابواب (غزل، الٹی ہو گئیں سب تدبیریں-میر تقی میر، دل ناداں تجھے ہوا کیا ہے-اسداللہ خاں غالب، ترانۂ ہندی-علامہ اقبال، نظم رات- اسماعیل میرٹھی، آوارہ - مجاز، غالب کا خط میر مہدی کے نام، ناظم جہاں حکیم محمد اعظم خاں، مسیح الملک حکیم اجمل خان، ورزش کے طریقے اور ہدایات، طبّی اشعار، مرثیہ حکیم محمود خاں-الطاف حسین حالی، طب کا تاریخی خاکہ - کمال الدین ہمدانی، رسوم وعادات - سرسید، عیدگاہ-پریم چند، قصۂ حاتم طائی-میر امّن-معاون کتاب: انتخاب ادب برائے طب وحکمت)<br>Nazm-o-Nasr ke Chand Muntakhab Abwab:<br>(Ghazal: Meer- Ulti Ho Gain Sab Tadbeeren, Ghalib- Dile Nadan Tujhe Huwa kiya Hai, Tarana Hindi- Allama Iqbal, Nazm: Raat- Ismail Merathi,Aawarah- Majaz, Khat Mir Mehdi ke Naam-Ghalib, Nazime Jahan Hakeem Azam Khan, Hakeem Ajmal Khan, Warzish ke Tareeqe aur Hidayaat, Tibbi Ash'aar, Marsiya Hakeem Mahmood Khan- Altaf Husain Haali, Tib ka Tareekhi Khaaka- Kamaluddin Hamdani, Rusoom wo Aadaat- Sir Syed, Eidgaah- Prem Chand, Qissa Hatim Tai- Meer Amman) | I | 10 | 9 | 18 |
| | **Part B: Arabic** | | | | |
| **7.** | حروفِ ہجاء، حروف شمسیہ وقمریہ، اسماء حرکات واعداد۔<br>Huroof-e-Hija, Huroof-e-Shamsiyyah, wa Qamariyyah, Asma-e-Harakaat –o-A'adad.<br>(Arabic Alphabet, Solar and Lunar Letters, Arabic Vowels and Numerals.) | II | 0 | 1 | 1 |
| **8.** | کلمہ اور اس کی اقسام، اسم، فعل، حرف۔<br>Kalimah aur uski Aqsam Ism, Fe'l, Harf.<br>(Word and its kinds, Noun, Verb, Particle). | II | 10 | 1 | 1 |
| **9.** | اسم کی تقسیم بلحاظ تعریف وتنکیر، بلحاظ جنس، بلحاظ عدد۔<br>Ism ki Taqseem balehaz-e- Tareef-o-Tamkeer, balehaz-e-Jins, balehaz-e-Adad.<br>(Kinds of Noun according to definition like (Definite noun, Indefinite noun), Gender, and Number). | II | | 1 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| **10.** | مرکب اور اس کی اقسام۔<br>Murakkab aur uski aqsam.<br>(Compound word and its kinds). | II | 10 | 1 | 1 |
| **11.** | مرکب ناقص: مرکب اضافی، مرکب توصیفی، مرکب اشاری۔<br>Murakkab-e-Naqis: Murakkab-e-Izafi, Murakkab-e-Tauseefi, Murakkab-e-Ishari.<br>(Incomplete Compound: Possessive Compound, Adjectival Compound, Demonstrative Compound). | II | | 2 | 4 |
| **12.** | مرکب تام یا کلام: جملہ اسمیہ، جملہ فعلیہ۔<br>Murakkab-e-Taam ya Kalam, Jumlah Ismiyyah, Jumlah Fe'liyyah.<br>(Complete Murakkab, or Sentence, Nominal Sentence, Verbal Sentence). | II | | 2 | 4 |
| **13.** | فعل اور اس کی اقسام باعتبار زمانہ: ماضی، حال، مستقبل۔<br>Fe'l aur uski Aqsam ba etebar-e-Zamana: Mazi, Hal, Mustaqbil.<br>(Verb and its kinds according to Tense: Past, Present and Future). | II | | 1 | 1 |
| **14.** | گردان ماضی اور اس کے صیغے۔<br>Gardan-e-Mazi aur uske Seeghe.<br>(Conjugation of Past tense and its Moods) | II | 15 | 1 | 2 |
| **15.** | گردان مضارع اور اس کے صیغے۔<br>Gardan-e-Muzare aur uske Seeghe.<br>(Conjugation of Indefinite Present and Future Tense and its Moods). | II | | 1 | 2 |
| **16.** | فعل ثلاثی مجرّد اور اس کے ابواب۔<br>Fe'l-e-Sulasi Mujarrad aur uske Abwab.<br>(Triliteral Primitive Verb and its Patterns). | II | | 1 | 2 |
| **17.** | فعل ثلاثی مزید اور اس کے ابواب۔<br>Fe'l-e-Sulasi Mazeed aur uske Abwab<br>(Triliteral Derived Verb and its Patterns). | II | | 2 | 4 |
| **18.** | فعل رباعی مجرّد و مزید۔<br>Fe'l-e-Rubaee Mujarrad wa Mazeed.<br>(Quadriliteral Verb, Primitive and Derived) | II | | 1 | 1 |
| **19.** | تقسیم فعل ماضی و مضارع باعتبار معروف و مجہول۔<br>Taqseem-e- Fe'l-e- Mazi-o- Muzare ba etebar-e Maroof-o- Majhool.<br>(Division of Past and Indefinite Present Tense according to Active and Passive). | II | | 1 | 2 |
| **20.** | گردان فعل امر و نہی۔<br>Gardan-e- Fe'l-e Amr-o- Nahi.<br>(Conjugation of Imperative and Prohibitive Verb). | II | | 1 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| **21.** | تقسیم اسم: جامد، مصدر و مشتق، اسم فاعل، اسم مفعول، اسم ظرف، اسم آلہ، اسم تفضیل، اسم مبالغہ، اسم تصغیر و صرف صغیر۔<br>Taqseem-e-Ism: Jamid, Masder wa Mushtaq, Ism-e- Fa'el, Ism-e-Mafool, Ism-e- Zarf, Ism-e-Alah, Ism-e- Tafzeel wa Ism-e-Mubalaghah, Ism-e- Tasgheer wa Sarfe Sagheer.<br>(Division of Noun: Primitive, Infinitive and Derivative, Active Participle, Passive Participle, Noun of Place and Time, Noun of Tool, Comparative and Superlative Noun and Exaggerative Noun, Diminutive Noun, and Small Conjugation) | III | 15 | 3 | 6 |
| **22.** | اعراب: تعریف و تقسیم، اعراب بالحروف، اعراب بالحرکات۔<br>Ierab, Tareef-o-Taqseem, Ierab bil Huroof, Ierab bil Harakat.<br>(Inflection Sign, its definition and division: by letters and by signs). | III | 05 | 1 | 2 |
| **23.** | مرفوعات، منصوبات، مجرورات۔<br>Marfooat, Mansoobat, Majroorat.<br>(Nominative Cases, Accusative Cases, Genitive Cases). | III | | 2 | 6 |
| **24.** | ضمائر مرفوعہ، ضمائر مجرورہ، ضمائر منصوبہ، اسماء اشارہ، اسماء استفہام، اسماء موصولہ۔<br>Zamair Marfooah, Majroorah-o- Mansoobah, Asma-e- Isharah, Asma-e-Istifham, Asma-e- Mausoolah.<br>(Pronouns in Nominative, Accusative and Genitive Cases, Demonstrative Pronouns, Interrogative Pronouns, Relative Pronouns). | III | | 2 | 4 |
| **25.** | عربی طبّی اصطلاحات و الفاظ کا جملوں میں استعمال۔<br>Arabi Tibbi Istilahat-o-Alfaz ka Jumlon me Istemal.<br>(Arabic Medical words and Terms and their uses in sentences). | II | 10 | 5 | 12 |
| | i) اسماء اعضاء انسان و رطوبات بدن۔<br>Asma-e-Aza-e-Insan wa Rutoobat-e-Badan.<br>(Names of the Organs of Human Body and Body Fluids) | | | | |
| | ii) اسماء امراض۔<br>Asma-e-Amraz (Names of the Diseases) | | | | |
| | iii) اسماء آلات۔<br>Asma-e-Alaat(Names of the Instruments and Equipments) | | | | |
| | iv) اسماء ادویہ۔<br>Asma-e-Advia<br>(Names of Drugs) | | | | |

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|---|---|---|---|---|---|
| | v) طبّی اشعار۔<br><br>Tibbi Ash'aar (verses of Unani Tibb)<br>الطّبُ حِفظُ صِحَّةٍ وبَرْءُ مَرَضٍ * مِنْ سَبَبٍ فی بَدَنٍ مُنْذُ عَرَضٍ<br>قِسْمَتُهُ الأُولیٰ بِعِلْمٍ وَعَمَلْ * وَالعِلْمُ فِی ثَلٰثَةٍ قَدِ اکْتَمَلْ<br>سَبْعُ طَبیعَاتٍ مِنَ الأُمُورِ * وَسِتَّةٌ وَکُلُّهَا ضَرُورِی<br>ثُمَّ ثَلاثَةٌ سُطِرَتْ فِی الْکُتُبْ * مِنْ عَرَضٍ وَ مَرَضٍ وَ سَبَبِ<br>وَعَمَلُ الطِّبِ عَلیٰ ضَرْبَیْن * فَوَاحِدٌ یُعْمَلُ بِالْیَدَیْن<br>وَغَیْرُهُ یُعْمَلُ بِالدَّوَاء * وَمَا یُقَدَّرُ مِنَ الْغِذاءِ<br>فَغَرْغِرَنْ وَاسْتَعْمِلِ السِّواکا * تُنَظِّفِ الْأَسْنانَ والْأَحْناکا<br>لا تأخُذِ الْماءَ عَلَی الطّعامِ * ولا عَلَی الْخُرُوْجِ مِن حَمّامِ<br>وَالصَّدْرُ وَالرِّیَةُ آلاتُ النَّفْسِ * فَإن تَصِحَّ فَالْحَیاةُ في حَرَسْ<br>وَاسْتَعْمِلِ الْحَمّامَ لِلْأوساخِ * وَلا تَکُنْ مِنْ ذاكَ في تَراخِ<br>وَالْجِسْمُ یَحْتاجُ إلی الْإسْتِفْراغِ * مِنْ سائرِ الْأعْضاءِ وَالدِّماغِ<br>أمّا الرِّیاضاتُ فَمِنْها مُعْتَدِلٌ * وَیَنْبَغِیْ لِمِثْلِ ذا أنْ نَمْتَثِلَ<br>فَإنَّها تُعْدِلُ الْأبْدانَا * تُخْرِجُ الْأثْقالَ وَالْأدْرانا<br>مِنْ بَلْغَمٍ وَمِرَّةٍ صَفْراءَ * وَمِنْ دَمٍ وَمِرَّةٍ سَوْداءَ<br>اَلْجِسْمُ مَخْلُوْقٌ مِنَ الْأمْشاجِ * مُخْتَلِفاتِ اللَّوْنِ وَالْمِزاجِ<br>ما قَهَرَ الْجِسْمَ فَمِنْ دَواءِ * مِنْها وَما أنْمیٰ فَمِنْ غِذاءِ<br>*** | | | | |
| **Total:** | | | | **60** | **120** |

Arabi Tibbi Istilahat (Supplement to Topic no. 25)

| اسماءاعضاءورطوبات بدن | | | |
|---|---|---|---|
| نمبر | الفاظ | معانی | انگریزی |
| 1. | بَدَنٌ ج أبدانٌ/ جِسمٌ ج أجسامٌ | جسم | Body |
| 2. | وَجهٌ ج وُجوهٌ | چہرہ | Face |
| 3. | رأسٌ ج رُؤوسٌ | سر | Head |

| | | | |
|---|---|---|---|
| 4. | جُمْجُمَةٌ ج جَماجِمُ | کھوپڑی | Skull |
| 5. | شَعْرٌ و شَعْرَةٌ ج اشْعَارٌ | بال | Hair |
| 6. | عَيْنٌ ج عُيُوْنٌ | آنکھ | Eye |
| 7. | مُقْلَةٌ ج مُقَلٌ / مُقْلاتٌ | آنکھ کاڈھیلا | Eyeball |
| 8. | جَفْنٌ ج أجْفانٌ / جُفُوْنٌ | پپوٹا | Eyelid |
| 9. | حاجِبٌ ج حَواجِبُ | ابرو/بھویں | Eyebrow |
| 10. | هُدْبٌ ج أهْدابٌ | پلک | Eyelash |
| 11. | أُذُنٌ ج آذانٌ | کان | Ear |
| 12. | أنْفٌ ج أُنُوفٌ | ناک | Nose |
| 13. | مَنْخَرٌ ج مَناخِرُ | نتھنا | Nostril |
| 14. | فَمٌ ج أفواهٌ | منھ | Mouth |
| 15. | شَفَةٌ ج شِفاهٌ | ہونٹ | Lip |
| 16. | لِسانٌ ج ألْسِنَةٌ | زبان | Tongue |
| 17. | سِنٌّ ج أسنانٌ | دانت | Tooth |
| 18. | لَهاةٌ ج لَهَواتٌ / لِهاءٌ | لوکی/کوّا | Uvula |
| 19. | جَبْهَةٌ ج جِباهٌ/جَبِيْنٌ ج جُبُنٌ | پیشانی | Forehead |
| 20. | خَدٌّ ج خُدُوْدٌ | گال | Cheek |
| 21. | وَجْنَةٌ ج وَجناتٌ | رخسار کا ابھرا ہوا حصہ | Cheek |
| 22. | فَكٌّ ج فُكُوكٌ | جبڑا | Jaw |
| 23. | ضِرْسٌ ج أضْرَاسٌ | داڑھ | Grinder/ Molar |
| 24. | عُنُقٌ ج أعْناقٌ | گردن | Neck |
| 25. | يَدٌ ج أيْدِيْ | ہاتھ | Hand |
| 26. | كَتِفٌ ج أكتافٌ | کندھا/شانہ | Shoulder |
| 27. | ذِراعٌ ج أذرُعٌ | بازو | Arm |
| 28. | مِرْفَقٌ ج مَرافِقُ | کہنی | Elbow |
| 29. | إصْبَعٌ ج أصابِعُ | انگلی | Finger |
| 30. | صَدْرٌ ج صُدُورٌ | سینہ | Chest |

| | | | |
|---|---|---|---|
| 31. | ضِلْعٌ ج أضْلاعٌ | پسلی | Rib |
| 32. | ثَدْيٌ ج أثْداءٌ | پستان | Breast |
| 33. | إبْطٌ ج آباطٌ | بغل | Armpit |
| 34. | بَطْنٌ ج بُطُوْنٌ | پیٹ | Abdomen |
| 35. | ظَهْرٌ ج ظُهُوْرٌ | پیٹھ | Back |
| 36. | رِجْلٌ ج أرْجُلٌ | پیر | Leg |
| 37. | فَخِذٌ ج أفْخاذٌ | ران | Thigh |
| 38. | وَرِكٌ ج أوْراكٌ | سرین | Hip |
| 39. | رُكْبَةٌ ج رُكَبٌ | گھٹنہ | Knee |
| 40. | ساقٌ ج سِيْقانٌ | پنڈلی | Shank |
| 41. | كَعْبٌ ج كُعُوْبٌ | ٹخنہ | Ankle |
| 42. | عَقِبٌ ج أعْقابٌ | ایڑی | Heel |
| 43. | قَدَمٌ ج أقدامٌ | قدم | Foot |
| 44. | جِلْدٌ ج جُلُوْدٌ | کھال | Skin |
| 45. | لَحْمٌ ج لُحُوْمٌ | گوشت | Flesh |
| 46. | شَحْمٌ ج شُحُوْمٌ | چربی | Fat |
| 47. | ظُفْرٌ ج أظْفارٌ | ناخن | Nail |
| 48. | قَفا ج أقْفاءٌ | گُدّی | Collarbone |
| 49. | تَرْقُوَةٌ ج تَراقِيْ | ہنسلی | Clavicle |
| 50. | شِرْيانٌ ج شَرايِيْنُ | آرٹری /رگِ شریان | Artery |
| 51. | وَرِيدٌ ج أوْرِدَةٌ | رگِ ورید | Vein |
| 52. | رِباطٌ ج أرْبِطَةٌ | لیگامنٹ | Ligament |
| 53. | وَتَرٌ ج أوْتارٌ | ٹنڈن | Tendon |
| 54. | قَلْبٌ ج قُلُوْبٌ | دل | Heart |
| 55. | كَبِدٌ ج أكْبادٌ | جگر/کلیجہ | Liver |
| 56. | كُلْيَةٌ ج كُلىً/ كُلْياتٌ | گردہ | Kidney |
| 57. | رِئَةٌ ج رِئاتٌ | پھیپڑا | Lung |

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|---|---|---|---|
| 58. | مِعىً /مَعْيٌ/مِعَاءٌ ج أمْعاءٌ | آنت | Intestine |
| 59. | مَرارَةٌ ج مَرارَاتٌ / مَرائرُ | پتّہ | Gall bladder |
| 60. | مَثانَةٌ ج مَثاناتٌ | مثانہ | Bladder |
| 61. | عَظْمٌ ج عِظامٌ | ہڈی | Bone |
| 62. | فَقْرَةٌ ج فِقارٌ | ریڑھ کی ہڈی | Vertebra |
| 63. | مَفْصِلٌ ج مَفاصِلُ | جوڑ | Joint |
| 64. | عَصَبٌ ج أعصابٌ | پٹھا | Nerve |
| 65. | رَحِمٌ ج أرْحامٌ | بچہ دانی | Uterus |
| 66. | عَضْلَةٌ ج عَضلاتٌ | عضلہ | Muscle |
| 67. | طِحالٌ | تلی | Spleen |
| 68. | غِشاءٌ ج أغْشِيَةٌ | جھلّی | Membrane |
| 69. | عُرُوْقٌ شَعْرِيَّةٌ | باریک رگیں | Capillaries |
| 70. | دَمٌ ج دِماءٌ | خون | Blood |
| 71. | دَمْعٌ ج دُمُوْعٌ | آنسو | Tears |
| 72. | عَرَقٌ | پسینہ | Sweat |
| 73. | بَوْلٌ | پیشاب | Urine |
| 74. | بَرازٌ | پاخانہ | Stool |
| 75. | بُصاقٌ/ لُعابٌ | تھوک | Saliva |
| 76. | مُخاطٌ | ناک کی رطوبت | Mucus |
| 77. | بَلْغَمٌ | بلغم | Sputum |
| 78. | صَدِيْدٌ / قَيْحٌ | پیپ | Pus |
| | اسماءامراض | | |
| 79. | مَرَضٌ ج أمْراضٌ / داءٌ ج أدْواءٌ / عِلّةٌ ج عِلَلٌ / سَقَمٌ ج أسْقامٌ | بیماری | Disease |
| 80. | مَرَضٌ مُزْمِنٌ | پرانامرض | Chronic disease |
| 81. | مَرَضٌ حادٌّ | تازہ مرض | Acute disease |

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| 82. | صُداعٌ | دردِ سر | Headache |
| 83. | حُمّىٰ ج حُمَّياتٌ | بخار | Fever |
| 84. | سُعالٌ | کھانسی | Cough |
| 85. | زُكامٌ | زکام | Common cold |
| 86. | نَزْلَةٌ / نَزْلَةُ بَرْدٍ | نزلہ/سردی | Catarrh/ Cold |
| 87. | وَجَعٌ ج أوجاعٌ / أَلَمٌ ج آلامٌ | درد | Pain |
| 88. | وَجَعُ الْمَفاصلِ/ اِلْتِهابُ المفاصلِ | جوڑوں کا درد | Joints pain / Arthritis |
| 89. | أَلَمٌ بَطْنِيٌّ / أَلَمٌ في الْبَطْنِ | پیٹ کا درد | Abdominal pain |
| 90. | أَلَمُ الأسنانِ | دانت کا درد | Toothache |
| 91. | اِلْتِهابٌ ج اِلْتِهاباتٌ | جلن کے ساتھ سوجن | Inflammation |
| 92. | اِلْتِهابُ الحَنْجَرَةِ / وَجْعُ الحَلَقِ | گلے کا درد | Sore throat |
| 93. | وَرَمٌ ج أوْرامٌ | ورم/سوجن | Swelling |
| 94. | عَدْوىٰ / عُفُوْنَةٌ | چھوت/آلودگی/بیماری لگ جانا | Infection |
| 95. | إسْهالٌ | دست | Loose motion |
| 96. | إمْساكٌ | قبض | Constipation |
| 97. | دُوارٌ | چکّر | Giddiness |
| 98. | غَثَيانٌ | متلی | Nausea |
| 99. | قَيْءٌ | اُلٹی | Vomit |
| 100 | فُواقٌ | ہچکی | Hiccup |
| 101 | ضَغْطُ الدَّمِ | بلڈ پریشر/فشارِ خون | Blood pressure |
| 102 | مَرَضُ السُّكَّرِيّ / داءُ السُّكَّرِيّ | ذیابیطس | Diabetes |
| 103 | يَرَقانٌ | پیلیا | Jaundice |
| 104 | نِقْرِسٌ | گٹھیا | Urarthritis / Gout |
| 105 | كُزازٌ | ٹیٹنس | Tetanus |
| 106 | صَرَعٌ | مرگی | Eilepsy |
| 107 | مَرَضُ السُّلِّ<br>سُلٌّ / دِقٌّ / دَرَنٌ | ٹی بی کی بیماری | Tuberculosis / TB |

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| 108 | حَصَاةُ الكُلْيَةِ | گردے کی پتھری | Kidney stone |
| 109 | حَكٌّ | خارش/ کھجلی | Itching |
| 110 | سَرطانٌ | کینسر | Cancer |
| 111 | شَلَلٌ / فالِجٌ | فالج/لقوہ | Paralysis |
| 112 | وَقْرٌ / صَمَمٌ | بہرہ پن | Deafness |
| 113 | تُخْمَةٌ | بدہضمی | Indigestion |
| 114 | جُرْحٌ ج جُرُوْحٌ | زخم | Injury |
| 115 | قُرْحٌ / قَرَحٌ ج قُرُوْحٌ | زخم | Wound |
| 116 | خُراجٌ | پھوڑا | Abscess |
| 117 | بَثْرَةٌ ج بَثَراتٌ / بُثُوْرٌ | پھنسی | Pimples |
| 118 | فَقْرُ الدمِ | خون کی کمی | Anemia |
| 119 | أَرَقٌ | بے خوابی/ نیند نہ آنا | Insomnia |
| 120 | رَبْوٌ | دمہ | Asthma |
| 121 | جُذامٌ | کوڑھ | Leprosy |
| 122 | حَصْبَةٌ | خسرہ نکلنا | Measles |
| 123 | وَباءٌ ج أَوْبِئَةٌ | وباء | Epidemic |
| 124 | جائحَةٌ ج جَوائِحُ | بڑی وباء | Pandemic |
| 125 | طاعُوْنٌ | طاعون | Plague |
| 126 | فَيْرُوْسُ كورونا | کوروناوائرس | Coronavirus |
| 127 | بَواسِير | بواسیر | Piles/ Hemorrhoids |

## اسماءآلات

| | | | |
|---|---|---|---|
| 128 | مِقْياسُ الحَرارةِ | تھرمامیٹر | Thermometer |
| 129 | سَمّاعَةٌ / سَمّاعَةٌ طِبّيّةٌ مِسْمَعُ الصَّدرِ | صدر بیں/آلہ | Stethoscope |
| 130 | مِقْياسُ ضَغْطِ الدم | بلڈ پریشر کا آلہ | Sphygmomanometer / BP Instrument |
| 131 | مِقْياسُ النَّبْضِ | نبض چیک کرنے کا آلہ | Pulsometer |
| 132 | مِكْواةٌ ج مَكاوِيْ | داغ لگانے کا آلہ | Cautery instrument |

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| 133 | شَرْطٌ / مِشْرَطٌ | نشتر | Lancet/ Fleam |
| 134 | مِحْجَمَةٌ ج مَحاجِمُ | پچھنہ لگانے کا آلہ | |
| 135 | مِحْقَنَةٌ ج مَحاقِنُ | انجیکشن کی پچکاری | Syringe |
| 136 | إبْرَةٌ جج إبَرٌ | سوئی | Needle |
| 137 | نَقّالَةُ المَرْضىٰ | اسٹریچر | Stretcher |
| 138 | كُرسِيٌّ مُتَحَرِّكٌ | پہیے دار کرسی | Wheel chair |
| 139 | سَيّارَةُ الإسْعافِ | ایمبولینس | Ambulance |
| 140 | صنْدُوْقُ الإسْعافاتِ الأوّلية | فرسٹ ایڈ بوکس | First aid box |
| 141 | مُدَرَّجُ العمَلِيّاتِ الجَراحيّةِ | آپریشن تھیٹر | Operation theater |
| 142 | غِرْبَالٌ ج غَرَابِيْل | چھلنی | Sieve |
| 143 | مِفْتَاحٌ ج مَفَاتِيح | کنجی/چابی | Key |
| | **اسماءادویہ** | | |
| 144 | دَواءٌ ج أدْوِيَةٌ | دوا | Medicine/ Drug |
| 145 | عَقّارٌ ج عَقاقِيْرُ | جڑی بوٹیاں | Herbal drugs |
| 146 | حَبّةٌ ج حُبُوْبٌ / قُرْصٌ ج أقراصٌ | گولی | Tablet/Pill |
| 147 | شَرابٌ / مَشْرُوْبٌ | پینے کی دوا | Syrup |
| 148 | حُقْنَةٌ | انجیکشن | Injection |
| 149 | حُقْنَةٌ شَرْجِيّةٌ | اینما | Enema |
| 150 | عِصابةٌ | پٹی | Dressing |
| 151 | ضِمادٌ | لیپ | Bandage |
| 152 | دُهْنٌ | روغن | Oil |
| 153 | بَنَفْسَجٌ | بنفشہ | |
| 154 | كَتّانٌ | السی | |
| 155 | قَرَنْفُلٌ | لونگ | Clove / Caryophyllata |
| 156 | هِيْلٌ | الائچی | Cardamom |
| 157 | كُرْكُمٌ | ہلدی | Turmeric/ Curcuma |

| | | | |
|---|---|---|---|
| 158 | فُلْفُلٌ | مرچ | Pepper |
| 159 | عُصارَةٌ/ عَصِيْرٌ ج عَصائرُ | عرق | Juice |
| 160 | طَبِيْخٌ | جوشاندہ | Decoction |
| 161 | نَقُوْعٌ | خیساندہ | |
| 162 | لَعُوْقٌ | چٹنی | Linctus |
| 163 | مَسْحُوْقٌ | سفوف | Powder |
| 164 | الشّبُّ اليَمانيُّ | پھٹکری | Alum |
| 165 | الدَّلْكُ / التدلِيكُ | مالش کرنا | Massage |
| 166 | الحِجامَةُ | حجامہ لگانا | Cupping |
| 167 | الفَصْدُ | فصد کھلوانا/پچھنہ لگانا | Venesection |
| 168 | إرْسالُ العَلَقِ / التّعْلِيْقُ | جونک لگانا | Leaching |
| | **دیگر متفرّق طبّی اصطلاحات** | | |
| 169 | مَريضٌ ج مَرْضىٰ | بیمار | Patient / Ill / Sick |
| 170 | جَريحٌ ج جَرْحىٰ | زخمی | Injured |
| 171 | طَبِيْبٌ ج أطِبّاءُ | ڈاکٹر | Doctor |
| 172 | مُمَرِّضَةٌ ج مُمَرِّضَاتٌ | نرس | Nurse |
| 173 | مُسْتَشْفىٰ ج مُسْتَشْفَياتٌ | ہسپتال | Hospital |
| 174 | مُسْتَوْصَفٌ ج مُسْتَوْصَفاتٌ | کلینک | Clinic |
| 175 | صَيْدَلِيَّةٌ ج صَيْدَلِيَّاتٌ | ڈرگ اسٹور/میڈیکل اسٹور/فارمیسی | Pharmacy / Medical store/ Chemist shop |
| 176 | صَيْدَلانِيٌّ ج صَيْدَلانِيُّوْنَ | کیمسٹ/دوافروش | Chemist |
| 177 | حُبْلىٰ / حامِلٌ | حاملہ | Pregnant |
| 178 | عاقِرٌ | بانجھ | Barren/ Infertile/ Childless |
| 179 | مُرْضِعٌ | دودھ پلانے والی | Suckling/ Breast feeding (mother) |
| 180 | جَنِيْنٌ ج أجِنّةٌ | بچہ جو پیٹ میں ہو | Foetus |
| 181 | أصَمُّ م صَمّاءُ ج صُمٌّ | بہرہ | Deaf |

| | | | |
|---|---|---|---|
| Dumb | گونگا | أَبْكَمُ م بَكْماءُ ج بُكْمٌ | 182 |
| Blind | اندھا/نابینا | أَعْمىٰ م عَمْياءُ ج عُمْيٌ | 183 |
| Lame | لنگڑا | أَعْرَجُ م عَرْجاءُ ج عُرْجٌ | 184 |
| Humpback | کبڑا | أَحْدَبُ م حَدْباءُ ج حُدْبٌ | 185 |
| One-eyed | کانا/ایک آنکھ والا | أَعْوَرُ م عَوْراءُ ج عُوْرٌ | 186 |

**Table 2: Contents of Urdu, Arabic and Mantiq wa Falsafa – (Paper II - Mantiq wa Falsafa)**

| | A2<br>List of Topics UNIUG-UAMF | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| | **Mantiq** | | | | |
| **1** | تعریف، موضوع اور غرض وغایت۔<br>Tareef, Mauzu, aur Gharaz-o- Ghayat.<br>(Definition, Aims and Objectives). | II | 10 | 1 | 2 |
| **2** | علم اور ادراک، اقسام علم، تصور و تصدیق اور ان کی اقسام۔<br>Ilm aur Idrak, Aqsam-e- Ilm, Tasawwur-o- Tasdeeq aur unki Aqsam.<br>(Knowledge and Perception, Kinds of Knowledge, Imagination and Judgement and their classification). | II | | 1 | 2 |
| **3** | معرف یا قول شارح، دلیل یا حجت۔<br>Mu'arrif ya Qawl-e- Shaareh, Daleel ya Hujjat.<br>(Definer or Explanatory Statement, Evidence or Argument) | II | 15 | 1 | 2 |
| **4** | دلالت کی تعریف و تقسیم، لفظ کی تعریف و تقسیم۔<br>Dalaalat ki Tareef-o- Taqseem, Lafz ki Tareef-o- Taqseem.<br>(Denotation: its definition and classification, Word: its definition and classification). | II | | 2 | 4 |
| **5** | مفہوم جزئی و کلی مع اقسام، نسب اربعہ۔<br>Mafhoom-e- Juzi wa Kulli mae Aqsam, Nisab-e- Arba'ah.<br>(Conception, Specific/Particular and general and their kinds, Four Relations) | II | 15 | 2 | 4 |
| **6** | قضایا: قضیہ حملیہ کی جملہ اقسام، قضیہ شرطیہ کی دو قسمیں: متصلہ و منفصلہ۔<br>Qazaya: Qaziyyah Hamliyyah ki jumla Aqsam, Qaziyyah Shartiyyah ki dow Qismen: Muttasilah-o- Munfasilah.<br>(Propositions, Clause and its kinds, Conditional Clause and its two kinds viz. Attached and Detached Clause). | II | 5 | 2 | 4 |
| **7** | تناقض، وحدات ثمانیہ اور عکس۔<br>Tanaquz, Wehdaat-e- Samaniyah, and Aks<br>(Contradiction, its eight Unities, and Reversion) | II | 10 | 1 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| **8** | حجت کی اقسام، قیاس، تمثیل، قیاس کی قسمیں۔<br>Hujjat ki Aqsam, Qiyas, Istiqra, Tamseel, Qiyas ki Qismein.<br>(Division of Arguments, Analogy, Induction, Allegory, and Kinds of Analogy). | II | | 4 | 8 |
| | **Falsafa (Philosophy)** | | | | |
| **9** | حکمت، تعریف و تقسیم، موضوع اور غرض وغایت۔<br>Hikmat, Tareef-o- Taqseem, Mauzu aur Gharaz-o- Ghayat.<br>(Philosophy, its Definition and kinds, Aims and objectives). | II | 20 | 1 | 3 |
| **10** | جسم، جسم طبعی، جسم تعلیمی، ہیولیٰ، صورت جسمیہ، صورت نوعیہ کی تعریف۔<br>Jism, Jism-e- Taba'i, Jism-e- Taleemi, Heula, Surat-e- Jismiyyah, Surat-e- Nauiyyah ki Tareef.<br>(Body, Physical Body, Educational Body, Matter, Shape, Definition of Body Shape and Species Shape). | II | | 1 | 2 |
| **11** | مکان، حیّز اور شکل کی تعریف۔<br>Makan, Hayyiz aur Shakl ki Tareef.<br>(Definition of Space, Locus and Shape). | II | | 1 | 2 |
| **12** | حرکت و سکون کی تعریف، غرض وغایت، اقسام و شرائط۔<br>Harakat wa Sukoon ki Tareef, Gharaz-o- Ghayat, Aqsam-o- Sharaayit.<br>(Motion and Rest, their Definitions, Aims and Objectives, Kinds and Conditions). | II | | 1 | 3 |
| **13** | مقولات عشر، زمانہ کی تعریف و توضیح۔<br>Maqoolat-e- Ashar, Zamanah ki Tareef-o- Tauzeeh.<br>(Ten Categories, Definition of Time and its explanation). | II | 10 | 1 | 2 |
| **14** | عناصر کی تعریف، اقسام، کیفیات و مزاج (اجمالی بیان)۔<br>Anasir ki Tareef, Aqsam, Kaifiyyaat-o-Mizaaj.<br>(Definition of Elements, Kinds, Conditions and Temperament (With brief description). | III | | 1 | 2 |
| **15** | کون و فساد، مرکبات تامہ، جمادات، نباتات، نفس نباتی، نفس حیوانی، نفس ناطقہ اور ان کے ماتحت کام کرنے والی قوتیں، مرکبات ناقص کی تعریف مع امثال۔<br>Kaun-o- Fasad, Murakkabat-e- Tammah, Jamadat, Nabatat. Wa Nafse Nabati, Nafse Haiwani, Nafse Natiqah aur unke matehat kaam karne wali Quwwatein, Murakkabat-e- Naqisa ki Tareef mae Amsal.<br>(Anabolism and Catabolism, Complete Compounds, Minerals, Plants and Botanical Being, Animal Soul, Human Soul and Faculties working under them. Definition of Incomplete Compounds along with examples). | III | | 5 | 10 |
| | **Hay'at (Astronomy)** | | | | |
| **16** | علم ہیئت کی تعریف اور طب سے اس کا تعلق۔<br>Ilm-e- Hay'at ki Tareef, aur Tib se uska Ta'alluq.<br>(Definition of Astronomy and its relation with Medicine). | III | 10 | 1 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **17** | کرہ، قطبین، خط سرطان، خط جدی، خط استواء، منطقۃ البروج۔<br>Kurah, Qutbain, Khatte Sartaan, Khatte Jaddi, Khatte Istiwa, Mintaqatul Burooj.<br>(Globe, Earth Poles, Tropic of Cancer, Tropic of Capricorn, Equator, Zodiac Line). | III | | 1 | 2 |
| **18** | دائرہ معدلالنہار، دائرہ نصف النہار۔<br>Dairah Muaddilun Nahar, Dairah Nisf-un- Nahar.<br>(Meridian Circle, Mid-Day Circle). | III | | 1 | 1 |
| | **Ibtedai Ilm-un-Nafs (Elementary Psychology)** | | | | |
| **19** | علم النفس کی تعریف واقسام۔<br>Ilm-un-Nafs ki Tareef-o- Aqsam.<br>(Psychology, its Definitions and Kinds) | III | 5 | 1 | 2 |
| **20** | علم النفس اور علم طب کا باہمی ربط، احساس، ادراک، مشاہدہ اور توجہ کا تعارف۔<br>Ilm-un-Nafs aur Ilm-e- Tib ka Bahami Rabt. Ehsas, Idrak, Mushahidah, aur Tawajjuh ka ta'arruf.<br>(Description of Interrelation between Psychology and Medicine. Introduction of Feelings, Perception, Observation and Attention). | III | | 1 | 2 |
| **Total:** | | | | **30** | **60** |

Total lecture hours (Paper-I and Paper-II : 60 (P-I Urdu 30+Arabic 30)+(P-II)30= 90
Total Non lecture hours (Paper-I and Paper-II) : 120 (P-I Urdu 60+Arabic 60)+(P-II)+60= 180

**Table 3: Learning objectives of Urdu, Arabic and Mantiq wa Falsafa UNIUG-UAMF (Paper I – Urdu and Arabic)**

| 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 to know | E3 Level Does/shows/ Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- Huroof-e- Tahajji, Huroof ki Mufrad aur Murakkab Shaklen, Huroof ki Ibtidai, darmiyani aur Akhri Shaklen, Hakari shaklen, Ham Saut Huroof, Musawwate aur musammate, Huroof ki Aqsaam-Rabt, Atf, Takhsees, Fujaiyyah, Waw Madoola, waw Atf, Khada Alif, Alif Maqsoora, Alif Mamdooda Alif wasl. Erab, Tanween, Tashdeed, Mad, Harfe Jaza, Harfe Shart, Harfe Istisna.** (Lecture:- **4** hour, Non lecture **8** hours) | | | | | | | | | |
| CO1 | Identify Huroof-e-Tahajji by reading and writing them. | Cognitive/Recall | MK | Knows | Lecture, Tutorial, | Written/ Viva | F | I | |
| CO1 | Differentiate between the Musawwate (Vowel) and Musammate (Consonant) through reading and writing. | Cognitive/Recall | DK | Knows how | Lecture, Audio Lingual method, | Written/ Viva | F | I | |
| CO1 | Identify the Ham Sout Huroof, describe the Huroof that have similar sound, as well as those which despit having similar sound bear difference in pronunciation. | Cognitive/Recall | DK | Knows | Audio Lingual method. | Written/ Viva | F | I | |
| CO1 | Describe Hakari Huroof with correct pronunciation and write them correctly through dictation. | Cognitive/Recall | MK | Knows | Lecture. | Written/ Viva | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1 | Identify Mufrad and Murakkab Huroof, and describe the beginning, middle and last forms of Huroof through reading and writing. And define those Huroof whose beginning, middle and last forms are similar. | Cognitive/Recall | MK | Knows | Problem Solving method | Written/ Viva | F & S | I | |
| CO1 | Define Rabt, Atf, Takhsees, Fujaaiyyah, waw Madoola, waw Atf, khada alif, alif Maqsoora, alif wasl, and describe their usages through writing and reading. | Cognitive/ Recall | MK | Knows how | Lecture, Problem Solving method | Written/ Viva | F & S | I | |
| CO1 | Demonstrate the comprehension of Erab i.e. Zabar, Zer, Pesh, Ulta Pesh and Jazm by reading out texts. | Cognitive/Application | DK | Knows how | Group discussion, E-learning. | Written/ Viva | F & S | I | |
| **Topic 2- Lafz (Kalma)- Maddah – Ishtiqaq – Do Harfi Lfz, She Harfi Lafz, Chahaar Harfi Lfz- Ism aur Uski Qismen- Fe'l aur uski Halaten- Zameer aur uski Qismen- Sifat aur uski Qismen. Qawaid: Mufrad Lafz- Pecheeda Lafz- Murakkab Lafz- Taradufi Murakkab, Murakkabate Rabti, Murakkabate Tauseefi, Murakkabate Adadi- Tabe Muhmal, Izafat, Tasniya, Wahid/Jama, Tazkeer wa Tanees (Jins), Azdaad, Sabqe aur Laheqe.**<br>(Lecture:- **4** hour, Non lecture **8** hours) | | | | | | | | | |
| CO2, CO3, CO4 | Define Mufrad Lafz, explain it by examples and demonstrate it through reading and dictation writing. | Cognitive/ Recall | MK | Knows | Lecture, Tutorial, | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Pecheeda Lafz, explain it by examples and demonstrate it through reading and dictation writing. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Describe the main difference between Mufrad Lafz and Pecheeda Lafz. | Cognitive/ Comprehension | MK | Knows how | Lecture, Group discussion, E-learning. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Murakkab Lafz and explain its different forms through examples and explain the main difference between Mufrad, Pecheeda and Murakkab Alfaaz. | Cognitive/Recall | MK | Knows how | Lecture, Tutorial. | Written/ Viva | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO2, CO3, CO4 | Identify Taradufi Murakkab, Murakkabat e Rabti, Murakkabat eTauseefi and Murakkabat e Adadi. . | Cognitive/Recall | MK | Knows how | Lecture, E-learning. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Tabe Muhmal and explain it by examples. | Cognitive/Comprehension | MK | Knows how | Lecture, Tutorial, E-learning. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Izafat, explain Muzaf, Muzaf ilaih and Harfe Izafat, Izafat Harfi/Lafzi, Izafate Erabi and the ways of Izafat of Persian and Arabic languages. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Describe the ways of making Wahid, Tasniya and Jama through examples. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Muzakkar and Muannas, explain the ways and rules of formulating Muzakkar and Muannas and mention their principles in Persian and Arabic languages, especially as per what is prevalent and used in Urdu. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Zid, identify its kinds and explain the difference between Mutazaad Mukhalif, Mutazaad Jinsi and Mutazaad Mutaradifi by examples. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| **Topic 3- Mustaqil Alfaaz ki qismen: Ism, Sifat, Zameer, Fe'l, Tameez, Ism ki Aqsaam: Ism Khas, Ism Aam, Ism Aam ki Aqsaam: Ism kifiyat, Ism Jama, Isme Zarf, Ism Aala, Sifat ki Aqsaam : Sifat Zati, Safat Nisbti, Sifat Adadi, Sifat Miqdaari, Sifat Zameeri, Zameer ki Aqsaam: Shakhsi, Mausoola, istifhamiya, Ishara, Tankeer.** (Lecture:- **4** hour, Non lecture **8** hours) | | | | | | | | | |
| CO2, CO3, CO4 | Identify Mustaqil Alfaaz, explain their kinds i.e. Ism, Sifat, Zameer, Feal and Tameez. | Cognitive/Recall | DK | Knows how | Lecture. | Written/ Viva | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO2, CO3, CO4 | Define Ism, identify its kinds, difrentiate between Ism Aam and Ism Khaas, and explain Ism Kaifiyat, Ism Jama, Ism Zarf and Ism Aala by examples. | Cognitive/ Comprehension | MK | Knows how | Lecture, Tutorial. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Sifat, identify its kinds, and explain Sifat Zati, Sifat Nisbati, Sifat Adadi, Sifat Miqdari and Sifat Zameeri. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Zameer, identify its kinds and explain Zameer Shakhsi, Zameer Mausoola, Zameer Istifhamiya, Zameer Ishara and Zameer Tankeeri. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| **Topic 4- Fe'l ke Zamane: Mazi, Hal, Mustaqbil, Fe'l ki Halaten Mana ke Etebar se:lazim, Muta'addi, Naqis, Fe'l ki Surten: Khabari, Sharti, Ehtemali, Amri and Masdari, Fe'l ke Seghe: Ghaib, Hazir, Mutakallim, Afaal Mazi ki Aqsaam: Mazi Mutlaq, Mazi Natamaam, Mazi Tamaam, Mazi Shartiya, Mazi Tamannai, Mazi Ehtemali, Afaal Hal ki Aqsaam: Muzare, Amr, Hal Mutlaq, Hal Natamaam, Hal Ehtemali, Aafaal Mustaqbil ki Aqsaam: Mustaqbil Mutlaq, Mustaqbil Madaami.Ghair Mustaqil Alfaaz ki Qismen: Rabt, Atf, Takhsees, Fujaiyah.** (Lecture:- 4 hour, Non lecture 8 hours) | | | | | | | | | |
| CO2, CO3, CO4 | Define Murakkab Naqis and its kinds. | Cognitive/Recall | DK | Knows how | Lecture. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Define Feal, describe its tenses i.e. Mazi, Hal, Mustaqbil, identify its conditions in terms of meaning i.e. Lazim, Mutaaddi and Naqqis, explain its forms i.e. Khabari, Sharti, Ehtemali, Amri and Masdari, and describe its Seeghe I.e. Ghaib, Hazir and Mutakallim . | Cognitive/Application | MK | Knows how | Lecture, Problem Solving method, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Explain in detail the kinds of Afaal Mazi i.e. Mazi Mutlaq, Mazi Natamaam, Mazi Tamaam, Mazi Sharti, Mazi Tamannai, Mazi Ehtemali. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. | Written/ Viva | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO2, CO3, CO4 | Give the detailed explaination of Afaal Hal's kinds i.e. Muzare, Amr, Hal Mutlaq, Hal Natamaam, Hal Ehtemali | Cognitive/Application | MK | Knows how | Team Based Learning. | Written/ Viva | F & S | I | |
| CO2, CO3, CO4 | Explain the kinds of Aafaal Mustaqbili.e. Mustaqbil Mutlaq, Mustaqbil Mudaami. | Cognitive/Comprehension | MK | Knows how | Lecture, Problem Solving method. | Written/Viva | F & S | I | |
| CO2, CO3, CO4 | Demonstrate proficiency in application of all the grammatical rules of Murakkab Tauseefi. | Cognitive/Application | MK | Knows how | Team Based Learning. Peer Assisted Learning, Group Discussion. | Written/Viva | F & S | I | |
| CO2, CO3, CO4 | Analyze Murakkab Ishari by explaining Musharun ilaih being used with Al and without Al. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. | Written/Viva | F & S | I | |
| CO2, CO3, CO4 | Define Ghair Mustaqil Alfaaz, describe their kinds, explain Rabt, Atf, Takhsees, Fujaiyah by examples. | Cognitive/Application | DK | Knows how | Team Based Learning. Peer Assisted Learning, Group Discussion. | Written/Viva | F & S | I | |
| **Topic 5- Jumla: Mufrad Jumla- Mubtada, Khabar, Fe'le Rabt.Murakkab Jumla: Ham Rutba Jumla, Tabe Jumla, Istidraki Jumla, Tardeedi Jumla,Alaamaat: Auqaaf ya Waqfa, Sakta, Waqfa, Rabta, Tafseela, Khatma, Sawalia, Fujaiya, ya Nidaiya, Qousain, Khat, Wawain, Zanjeerah.**<br>(Lecture:- **5** hour, Non lecture 10 hours) | | | | | | | | | |
| CO2, CO4 | Define Jumla, identify its components and their proper order i.e. Mubtada, Khabar and Feal e Rabt. | Cognitive/Recall | DK | Knows how | Lecture, E-learning. | Written/Viva | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO2, CO4 | Define Mufrad and Jumla and explain the difference between them. | Cognitive/Comprehension | MK | Knows how | Team Based Learning. Peer Assisted Learning, Group Discussion. | Written/Viva | F & S | I | |
| CO2, CO4 | Explain the Khabar as well as feal, Faail, Mafuool and Muta'alliq e Feal. | Cognitive/Comprehension | MK | Knows how | Lecture, Problem Solving method. | Written/Viva | F & S | I | |
| CO2, CO4 | Explain Murakkab Jumla, Ham Rutba Jumla, Tabe Jumla, Istidraki Jumla, Tardeedi Jumla. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Illustrate Saada and Khabaria Jumle by writing examples. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Define Alaamaat, explain different forms of Alaamaat i.e. Auqaaf or Waqfa- Sakta, Waqfa, Raabta, Tafseela, Khatma, Sawalia, Fujaiya, Nidaiya, and identify different ways of their usages. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Illustrate also Alaamaat like Qousain, Khat, Wawain, Zanjeerah, and the ways of their usages by writing examples. | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| **Topic 6- Nazm-o-Nasr ke Chand Muntakhab Abwab:(Ghazal: Meer- Ulti Ho Gain Sab Tadbeeren, Ghalib- Dile Nadan Tujhe Huwa kiya Hai, Tarana Hindi- Allama Iqbal, Nazm: Raat- Ismail Merathi,Aawarah- Majaz, Khat Mir Mehdi ke Naam-Ghalib, Nazime Jahan Hakeem Azam Khan, Hakeem Ajmal Khan, Warzish ke Tareeqe aur Hidayaat, Tibbi Ash'aar, Marsiya Hakeem Mahmood Khan- Altaf Husain Haali, Tib ka Tareekhi Khaaka- Kamaluddin Hamdani, Rusoom wo Aadaat- Sir Syed, Eidgaah- Prem Chand, Qissa Hatim Tai- Meer Amman)** (Lecture: -**9** hour, Non lecture 1**8** hours) | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|
| CO2, CO4 | Identify the sentences and analyse their structures | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Recognize different kinds of Urdu texts | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Define the verse and prose and explain the distinguishing differences between them | Cognitive/Recall | MK | Knows how | Lecture, E-learning. | Written/ Viva | F & S | I | |
| CO2, CO4 | Demonstrate good understanding of the language through reading and writing | Cognitive/Comprehend | MK | Knows how/Shows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| CO2, CO4 | Demonstrate the capability of using literary words of the language | Cognitive/Comprehend | MK | Knows how | Lecture, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| **Topic 7 - Huroof-e-Hijaa, Huroofe Shamsiyyah wa Qamariyyah, Asma-e-Harakat wa Adaad**. (Lecture:- **1** hour, Non lecture **1** hours) | | | | | | | | | |
| CO1 | Identify, read and write Huroof-e-Hijaa, join the Huroof with correct Harakat, and distinguish between Huroof-e Shamsiyyah and Qamariyyah. | Cognitive/Recall | MK | Knows | Lecture, Tutorial, Bilingual method. | Written/ Viva | F | I | |
| CO1 | Describe Arabic numerals; differentiate between the cardinal and ordinal numbers. | Cognitive/Recall | MK | Knows how | Lecture, Tutorial, Audio Lingual method, Total Physical Response. | Written/ Viva | F | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1 | Enumerate the numbers up to the hundred. | Cognitive/Recall | DK | Knows | Audio Lingual method, Natural Approach. | Written/ Viva/ Quiz/ puzzles | F | I | |
| **Topic 8 -Kalimah aur uski Aqsaam, Ism, Fe'l, Harf**.(Lecture:- **1** hour, Non lecture **1** hours) | | | | | | | | | |
| CO1 | Identify Kalimah as a single meaningful unit of the sentence. | Cognitive/Recall | DK | Knows | Lecture, Bilingual method. | Written/ Viva | F & S | I | |
| CO1 | Define and distinguish each kind of Kalimah. | Cognitive/Recall | MY | Knows | Tutorial, Problem Solving method | Written/ Viva | F & S | I | |
| CO1 | Identify and enumerate the signs of noun, verb and particle. | Cognitive/ Recall | DK | Knows how | Lecture, Problem Solving method | Written/ Viva | F & S | I | |
| CO1 | Demonstrate the comprehension of the signs of each kind of Kalima by examples. | Cognitive/Application | DK | Knows how | Structural Approach, E-learning. | Written/ Viva | F & S | I | |
| **Topic 9 - Ism ki Taqseem balehaz-e- Tareef-o-Tankeer, balehaz-e-Jins, balehaz-e-Adad** (Lecture:- **1** hours, Non lecture **3** hours) | | | | | | | | | |
| CO1 | Identify the bases of the noun classification. | Cognitive/ Recall | NK | Knows | Lecture, Tutorial, | Written/ Viva | F& S | I | |
| CO1 | Explain the difference between Marifa and Nakira. | Cognitive/Comprehension | MK | Knows how | Lecture, Bilingual method, E-learning. | Written/ Viva | F & S | I | |
| CO1 | Define and distinguish masculine and feminine words. | Cognitive/ Comprehension | MK | Knows how | Lecture, Group discussion, E-learning. | Written/ Viva | F & S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Enumerate the signs of the word's femininity. | Cognitive/Recall | MK | Knows how | Lecture, Tutorial, Structural Approach. | Written/ Viva | F & S | I | |
| CO1 | Identify the singular and plural nouns. | Cognitive/Recall | MK | Knows how | Lecture, Structural Approach, E-learning. | Written/ Viva | F & S | I | |
| CO1 | Classify and distinguish the types of plural nouns. | Cognitive/Comprehension | MK | Knows how | Lecture, Tutorial, Structural Approach, E-learning. | Written/ Viva | F & S | I | |
| CO1 | Identify Jama Muzakkar Salim and Jama Muannas Salim. | Cognitive/Comprehension | MK | Knows how | Lecture, Structural Approach, E-learning, Group Discussion. | Written/ Viva | F & S | I | |
| **Topic 10 - Murakkab aur uski Aqsam**.(Lecture:- **1** hour, Non lecture **1** hour) | | | | | | | | | |
| CO1 | Identify Compound word (Murakkab). | Cognitive/Recall | DK | Knows how | Lecture. | Written/ Viva | F & S | I | |
| CO1 | Classify the compound into complete (Taam) and incomplete (Naqis). | Cognitive/ Comprehension | MK | Knows how | Lecture, Tutorial. | Written/ Viva | F & S | I | |
| **Topic 11 - Murakkab-e- Naqis, Murakkab-e-Izafi, Murakkab-e-Tauseefi, Murakkab-e-Ishari**. (Lecture:- **2** hours, Non lecture 4 hours) | | | | | | | | | |
| CO1 | Define Murakkab Naqis and its kinds. | Cognitive/Recall | DK | Knows how | Lecture. | Written/ Viva | F & S | I | |
| CO1 | Analyse Murakkab Izafi distinguishing Muzaf and Muzaf ilaih. | Cognitive/Application | MK | Knows how | Lecture, Bilingual method, Problem Solving method. | Written/ Viva | F & S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Enumerate the grammatical rules of both. | Cognitive/Recall | MK | Knows how | Lecture, Bilingual method, E-learning. | Written/ Viva | F & S | I | |
| CO1 | Produce examples of Murakkab Izafi. | Cognitive/Application | MK | Knows how | Team Based Learning. | Written/ Viva | F & S | I | |
| CO1 | Analyse Murakkab Tauseefi distinguishing Mausoof and Sifat. | Cognitive/Comprehension | MK | Knows how | Lecture, Bilingual method, Problem Solving method. | Written/Viva | F & S | I | |
| CO1 | Demonstrate proficiency in application of all the grammatical rules of Murakkab Tauseefi. | Cognitive/Application | MK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | I | |
| CO1 | Analyze Murakkab Ishari by explaining Musharun ilaih being used with Al and without Al. | Cognitive/Comprehension | DK | Knows how | Lecture, Bilingual method, E-learning. | Written/Viva | F & S | I | |
| CO1 | Demonstrate proficiency in creating plenty of examples of each kind of Murakkab Naqis. | Cognitive/Application | DK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | I | |
| **Topic 12 -Murakkab-e-Taam ya Kalam, Jumlah Ismiyyah, Jumlah Fe'liyyah**.(Lecture:- **2** hour, Non lecture **4** hour) | | | | | | | | | |
| CO1 | Categorize Murakkab Taam complete sentence into Jumla Ismiya and jumla Faeliyya. | Cognitive/Recall | DK | Knows how | Lecture, Bilingual method, E-learning. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Demonstrate the comprehension of all the grammatical rules pertaining to Mubtada and Khabar. | Cognitive/Comprehension | MK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | II | |
| CO1 | Compare between Jumla Ismiya and Murakkab Tauseefi. | Cognitive/Comprehension | MK | Knows how | Lecture, Problem Solving method. | Written/Viva | F & S | II | |
| **Topic 13 -Fe'l aur uski Aqsam ba etebar-e- Zamana: Mazi, Hal, Mustaqbil**.(Lecture:- **1** hour, Non lecture **1** hour) | | | | | | | | | |
| CO3 | Define the verb and identify its kinds in terms of past, present and future. | Cognitive/Recall | MK | Knows how | Lecture, Bilingual method. | Written/Viva | F & S | II | |
| CO3 | Identify the structural signs of each tense of verb. | Cognitive/Recall | NK | Knows how | Lecture/Structural Approach. | Written/Viva | F | II | |
| **Topic 14 -Gardan-e- Mazi aur uske Seeghe**.(Lecture:- 1 hours, Non lecture 2 hours) | | | | | | | | | |
| CO3 | Describe Gardan-e-Mazi, and identify all its Seeghe | Cognitive/Recall | MK | Knows how | Lecture, Bilingual method, E-learning. | Written/Viva | F & S | II | |
| CO3 | Distinguish each Seegha from the other. | Cognitive/Comprehension | MK | Knows how | Lecture/Structural Approach. | Written/Viva | F & S | II | |
| CO3 | Apply the Gardan-e-Mazi on several different verbs. | Cognitive/Application | DK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO3 | Use the Seeghe in group conversation. | Cognitive/Application Affective/ Responding | NK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F | II | |
| **Topic 15 - Gardan-e-Muzare aur uske Seeghe**.(Lecture:- **1** hours, Non lecture 2 hours) | | | | | | | | | |
| CO3 | Describe Gardan-e-Muzare, identify all its Seeghe | Cognitive/Recall | MK | Knows how | Lecture, Bilingual method, E-learning. | Written/Viva | F & S | II | |
| CO3 | Distinguish each Seegha from the other. | Cognitive/Comprehension | MK | Knows how | Lecture/Structural Approach. | Written/Viva | F & S | II | |
| CO3 | Apply the Gardan-e-Muzare on several different verbs. | Cognitive/Application Affective/Responding | DK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | II | |
| CO3 | Use the Seeghe in group conversation. | Cognitive/Application Affective/Responding | NK | Knows how | Team Based Learning. Peer Assisted Learning, And Communicative Approach. | Written/Viva | F | II | |
| **Topic 16 - Fe'l-e-Sulasi Mujarrad aur uske Abwab**(Lecture:- 1 hours, Non lecture **2** hours) | | | | | | | | | |
| CO3 | Enumerate and compare all the Abwab-e-Sulasi Mujarrad. | Cognitive/Recall | MK | Knows how | Lecture, Structural Approach, E-learning. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO3 | Identify several different verbs under these Abwab. | Cognitive/Application | DK | Knows how | Team Based Learning. | Written/Viva | F & S | II | |
| **Topic 17 - Fe'l-e-Sulasi Mazeed aur uske Abwab**. (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |
| CO3 | Identify and distinguish all Abwab-e-Sulasi Mazeed be Harf and their Seeghe | Cognitive/ Comprehension | MK | Knows how | Lecture, Structural Approach, E-learning. | Written/Viva | F & S | II | |
| CO3 | Identify and distinguish all Abwab-e-Sulasi Mazeed be Harfain and their Seeghe | Cognitive/Comprehension | MK | Knows how | Lecture/Structural Approach. | Written/Viva | F & S | II | |
| CO3 | Identify Bab-e-Istif'aal only as Bab-e-Sulasi Mazeed be-Salasati Huroof. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO3 | Identify and describe several different verbs under these Abwab. | Cognitive/Application | MK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | II | |
| **Topic 18** - **Fe'l-e- Rubaee Mujarrad wa Mazeed**(Lecture:- **1** hours, Non lecture 1 hours) | | | | | | | | | |
| CO3 | Describe Fe'l-e-Rubai Mujarrad | Cognitive/Recall | MK | Knows how | Lecture, E-learning | Written/Viva | F & S | II | |
| CO3 | Describe Fe'l-e-Rubai Mazeed | Cognitive/Recall | NK | Knows how | Lecture, E-learning | Written/Viva | F | II | |
| **Topic 19**. **Taqseem-e-Fe'l-e-Mazi-o-Muzare ba etebar-e-Maroof-o-Majhool**. (Lecture:- 1 hours, Non lecture 2 hours) | | | | | | | | | |
| CO4 | Define Maroof and Majhool and distinguish between them with their signs. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning, Structural Approach, | Written/Viva | F & S | II | |

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| CO4 | Frame sentences using both Mazi and Muzare Maroof and Majhool | Cognitive/Application Affective/Characterizing | DK | Knows how | Team Based Learning, Communicative Approach. | Written/Viva | F & S | II | |
| **Topic 20 -Gardan-e-Fe'l-e Amr-o-Nahi**. (Lecture:- **1** hours, Non lecture **2** hours) | | | | | | | | | |
| CO4 | Define Fe'l-e-Amr, and explain the steps to formulate it. | Cognitive/Comprehension | MK | Knows how | Lecture, Structural Approach. | Written/Viva | F & S | II | |
| CO4 | Read out and write Gardan-e-Amr and use them in sentences. | Cognitive/Application Affective/Responding | MK | Knows how | Natural Approach, Simulation. | Written/Viva | F & S | II | |
| CO4 | Define Fe'l-e-Nahi, and explain the way of its formulation. | Cognitive/Comprehension | MK | Knows how | Lecture, Structural Approach. | Written/Viva | F & S | II | |
| CO4 | Read out and write Gardane-e-Nahi and use them in sentences. | Cognitive/Application Affective/Responding | MK | Knows how | Natural Approach, Simulation. | Written/Viva | F & S | II | |
| **Topic 21** - **Taqseem-e-Ism: Jamid, Masder wa Mushtaq, Ism-e-Fa'el, Ism-e- Mafool, Ism-e-Zarf, Ism-e-Alah, Ism-e-Tafzeel wa Ism-e-Mubalaghah, Ism-e-Tasgheer, Sarfe Sagheer**. (Lecture:- **3** hours, Non lecture **6** hours) | | | | | | | | | |
| CO2,3 | Identify Ism-e-Jamid, Masder and Mushtaq | Cognitive/Recall | MK | Knows how | Lecture, Structural Approach, | Written/Viva | F & S | III | |
| CO2,3 | Enumerate Asma-e-Mushtaqqah. | Cognitive/ Recall | MK | Knows how | Group Discussions. | Written/Viva | F & S | III | |
| CO2,3 | Explain the procedures of formulating Ism-e-Faael, Ism-e-Mafool and the other Nominal Derivatives from Maddah/Masder. | Cognitive/ Comprehension | MK | Knows how | Lecture, Structural Approach, Group Discussion. | Written/Viva | F & S | III | |

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|---|---|---|---|---|---|---|---|---|---|
| CO2,3 | Demonstrate proficiency in formulating Isme-e-Faael and Ism-e-Mafool from all the Abwaab-e-Sulasi Mujarrad, Sulasi Mazeed and Rubai. | Cognitive/Application Affective/Characterizing | MK | Knows how | Team Based Learning. Peer Assisted Learning. | Written/Viva | F & S | III | |
| **Topic 22 - Ierab, Tareef-o-Taqseem, Ierab bil Huroof, Ierab bil Harakat**. (Lecture:- **1** hours, Non lecture **2** hours) | | | | | | | | | |
| CO4 | Identify the significance of Ierab in determination of the meanings. | Cognitive/Comprehension | MN | Knows how | Lecture, E-learning | Written/Viva | F & S | III | |
| CO4 | Define Ierab bil Harakat | Cognitive/Recall | DK | Knows how | Lecture, E-learning | Written/Viva | F & S | III | |
| CO4 | Locate the Ierab bil Huroof describing the particular Ierab of Tasniyah, Jama Muzakkar Salim and Asma-e-Sittah | Cognitive/Recall | MK | Knows how | Lecture, E-learning, Problem Solving method | Written//Viva | F & S | III | |
| **Topic 23** - **Marfooat, Mansoobat, Majroorat**. (Lecture: - **2** hours. Non lecture 6 hours) | | | | | | | | | |
| CO4 | Define and enumerate All Marfooat, Mansoobat and Majroorat. | Cognitive/Recall | MK | Knows how | Lecture, Problem Solving method. | Written/Viva | F | III | |
| **Topic 24** - **Zamair Marfooah, Majroorah-o-Mansoobah, Asma-e-Isharah, Asma-e-Istifham, Asma-e-Mausoolah**. (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |
| CO4 | Define Zamaair, enumerate their Seeghe, distinguish between Munfasilah and Muttasilah, and use them in sentences. | Cognitive/ Recall | DK | Knows how | Lecture. | Written/Viva | F & S | III | |
| CO4 | Define Asma-e-Isharah, describe their Seeghe, and use them in sentences. | Cognitive/Recall | DK | Knows how | Lecture, Group discussions. | Written/Viva | F & S | III | |

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|---|---|---|---|---|---|---|---|---|---|
| CO4 | Define Asma-e-Mausoolah , mention their Seeghe and use them in sentences. | Cognitive/Recall | NK | Knows how | Lecture, Group discussions. | Written/Viva | F | III | |
| **Topic 25** - **Arabi Tibbi Istilahat-o-Alfaz ka Jumlon me Istemal**. (Lecture:- **5** hours, Non lecture **12** hours)<br><br>i) Asma-e-Aza-e-Insan wa Rutoobat-e-Badan. | | | | | | | | | |
| CO1 | Identify the Arabic names of human body organs with correct spelling and pronunciation. | Cognitive/Application | MK | Knows how | Team Based Learning, Natural and Communicative Approach. | Written/Viva | F & S | II | |
| CO1 | Construct Arabic sentences using the body parts' names. | Cognitive/ Application Affective/ Organizing | DK | Knows how | Team Based Learning, Natural and Communicative Approach. | Written/ Quiz/ word cloud Viva | F & S | II | |
| ii) Asma-e-Amraz | | | | | | | | | |
| CO2 | Identify the Arabic names of diseases with correct spelling and pronunciation. | Cognitive/ Application | MK | Knows | Team Based Learning, Communicative Approach. | Written/Viva | F & S | II | |
| CO2 | Construct sentences using the Arabic names of diseases. | Cognitive/ Application Affective/Organizing | DK | Knows how | Team Based Learning, Communicative Approach. | Written/Viva | F & S | II | |
| iii) Asma-e-Aalaat | | | | | | | | | |

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| CO2 | Identify the Arabic names of medical instruments and equipments with their correct spelling and pronunciation. | Cognitive/ Application | MK | Knows how | Team Based Learning, Communicative Approach. | Written/Viva | F & S | II | |
| CO2 | Make sentences in Arabic using the medical equipments' names. | Cognitive/ Application Affective/ Organizing | DK | Knows how | Team Based Learning, Communicative Approach. | Written/ Presentations/Viva | F & S | II | |
| iv) Asma-e-Advia | | | | | | | | | |
| CO2 | Identify the Arabic names of Unani drugs with their correct spelling and pronunciation. | Cognitive/ Application | MK | Knows how | Team Based Learning, Communicative Approach. | Written/ Team assessment/Viva | F & S | II | |
| CO2 | Frame sentence in Arabic using the Unani drugs' names. | Cognitive/ Application Affective/Organizing | DK | Knows how | Team Based Learning, Communicative Approach. | Written/Viva | F & S | II | |
| v) Tibbi Ash'aar | | | | | | | | | |
| CO2,CO4 | Understand and recite Arabic Tibbi verses | Cognitive/Recall | MK | Know how/Shows how | Lecture, Audio lingual method | Written/Viva | F & S | II | |

**Table 3: Learning objectives of Urdu, Arabic and Mantiq wa Falsafa UNIUG-UAMF (Paper II - Mantiq wa Falsafa)**

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| 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 to know | E3 Level Does/shows/ Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **(Mantiq)**<br>**Topic 1**. **Tareef, Mauzu, aur Gharaz-o-Ghayat**. (Lecture:- **1** hour, Non lecture **2** hours) | | | | | | | | | |
| CO5 | Explain the literal and terminological definition of Mantiq with the mention of its aims and objectives. | Cognitive/ Recall | MK | Knows how | Lecture, Tutorial. | Written/Viva | F & S | I | |
| **Topic 2**. **Ilm aur Idrak, Aqsam-e-Ilm, Tasawwur-o-Tasdeeq aur unki Aqsam**. (Lecture:- **1** hour, Non lecture **2** hours) | | | | | | | | | |
| CO5 | Define Ilm and Idrak. | Cognitive/Recall | MK | Knows | Lecture | Written/Viva | F & S | I | |
| CO5 | Explain Ilm's classification into Tasawwur and Tasdeeq and their subdivision into Badeehi and Nazari. | Cognitive/Comprehension | MK | Knows how | Lecture, Group Discussions. | Written/Viva | F & S | I | |
| **Topic 3**. **Mu'arrif ya Qawl-e-Shaareh, Daleel ya Hujjat**. **Time** (Lecture:- **1** hour, Non lecture **2** hour) | | | | | | | | | |
| CO5 | Define Muarrif, Qawl-e Shareh and Tareef as synonyms, and similarly Hujjat and Daleel. | Cognitive/Recall | MK | Knows | Lecture, Group Discussions. | Written/Viva | F & S | I | |
| **Topic 4.Dalaalat ki Tareef-o-Taqseem, Lafz ki Tareef-o-Taqseem**. (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |
| CO5 | Define Dalalat, Daal, Madlool, and identify Dalalat's division into Lafzi and Ghair Lafzi and all their subdivisions. | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. | Written/Viva | F & S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO5 | Explain the kinds of Dalalat-e-Lafzi Wad'ee | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | I | |
| CO5 | Identify Lafz-e-Mufrad and Murakkab and their classifications and subclassifications. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | I | |
| **Topic 5**. **Mafhoom-e- Juz'ee wa Kulli mae Aqsam, Nisab-e- Arba'ah. Muarrif aur uske aqsam**. (Lecture:- **2** hours. Non lecture **4** hours) | | | | | | | | | |
| CO5 | Define Mafhoom and its division into Kulli and Juz'ee. | Cognitive/Recall | MK | Knows | Lecture, E-learning. | Written/Viva | F & S | I | |
| CO5 | Enumerate Kulliyat-e-Khamsah, illustrating each of them with examples. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Problem Solving method. | Written/ Quiz/ Viva | F & S | I | |
| CO5 | Enumerate Nisab-e-Arba'ah defining each Nisbat and comparing it with the other | Cognitive/Recall | MK | Knows | Lecture, E-learning. Problem Solving method. | Written/Viva | F & S | I | |
| CO5 | Define the kinds of Muarrif comparing them with each other. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | I | |
| **Topic 6**. **Qazaya: Qaziyyah Hamliyyah ki jumla Aqsam, Qaziyyah Shartiyyah ki dow Qismen: Muttasilah-o-Munfasilah**. (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |
| CO6,7 | Define Qaziyyah differentiating it from Insha and describing the components of Qaziyyah Hamliyyah. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO6,7 | Identify all the classifications of Qaziyyah Hamliyyah | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO6,7 | Define Qaziyyah Shartiyyah Muttasilah and Munfasilah. | Cognitive/Recall | DK | Knows | Lecture, E-learning. Problem Solving method. | Written/Viva | F & S | II | |
| CO6,7 | Define all the subclassifications of Qaziyyah Shartiyyah Muttasilah and Munfasilah. | Cognitive/Recall | NK | Knows how | Lecture, E-learning. Problem Solving method. | Written/Viva | F & S | II | |
| **Topic 7**. **Tanaquz, Wehdaat-e-Samaniyah, and Aks** (Lecture:- **1** hours, Non lecture **2** hours) | | | | | | | | | |
| CO6,7 | Define Tanaquz and enumerate its Wehdat-e-Samaniyah. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO6,7 | Apply Wehdat-e- Samaniyah and Illustrate Tanaquz by analyzing seemingly contradictory statements. | Cognitive/Application Affective/Organizing | DK | Knows how | Lecture, E-learning. Problem Solving method. | Written/Viva | F & S | II | |
| CO6,7 | Define Aks and identify its classification into Aks Mustawi and Aks-e-Naqeez. | Cognitive/Comprehension | NK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| **Topic 8.Hujjat ki Aqsam, Qiyas, Istiqra, Tamseel, Qiyas ki Qismein**. (Lecture:- **4** hours, Non lecture **8** hours) | | | | | | | | | |
| CO6,7 | Define Hujjat and identify its classification. | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO6,7 | Define Qiyas and its formulation and illustrate the way to reach the conclusion through Qiyas. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. Problem Solving method. | Written/ PBL/Viva | F & S | II | |
| CO6,7 | Identify the 5 kinds of Qiyas on the basis of Maaddah and the 6 Yaqeeniyyaat . | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO6,7 | Identify all the categories and subcategories of Qiyas | Cognitive/Comprehension | NK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |
| CO6,7 | Define Istiqra and Tamseel. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| CO7 | Demonstrate the application of Qiyas in diagnosing diseases, and Istiqra in clinical research of medicine. | Cognitive/Application Affective/Characterizing | NK | Knows how | Lecture, E-learning. Problem Solving method. | Written/Viva | F & S | II | |
| **(Falsafa)**<br><br>**Topic 9**. **Hikmat, Tareef-o-Taqseem, Mauzu aur Gharaz-o-Ghayat**. (Lecture:- **1** hour, Non lecture **3** hours) | | | | | | | | | |
| CO8 | Define Falsafa literally and terminologically. | Cognitive/Recall | MK | Knows | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO8 | Explain classification of Hikmat into Amali and Nazari and their sub-classifications. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |
| CO9 | Describe the aims and objectives of Falsafa. | Cognitive/Recall | NK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| **Topic 10**. **Jism, Jism-e-Taba'I, Jism-e-Taleemi, Heula, Surat-e-Jismiyyah, Surat-e-Nauiyyah ki Tareef**. (Lecture:- **1** hour, Non lecture **2** hour) | | | | | | | | | |
| CO9, 10 | Define Jism and all its types. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| **Topic 11**. **Makan, Hayyiz aur Shakl ki Tareef**. (Lecture:- **1** hour, Non lecture **2** hour) | | | | | | | | | |
| CO9,10 | State the philosophical definitions of Makan, Hayyiz and Shakl. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| **Topic 12**. **Harakat wa Sukoon ki Tareef, Gharaz-o- Ghayat, Aqsam-o- Sharaayit**. (Lecture:- **1** hour, Non lecture **3** hours) | | | | | | | | | |
| CO9, 10 | Define Harakat and Sukoon in terms of philosophy. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. | Written/Viva | F & S | II | |
| CO9 | Describe 6 conditions for Harakah to take place. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| CO9 | Identify the division of Harakat on the basis of Mutaharrik and in view of Muharrik. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |
| **Topic 13**. **Maqoolat-e-Ashar, Zamanah ki Tareef-o-Tauzeeh**. (Lecture:- **1** hour, Non lecture **2** hours) | | | | | | | | | |
| CO9 | Identify and enumerate Maqoolat-e-Ashar. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | II | |
| CO9, 10 | Explain Zamanah in terms of the Unani philosophy. | Cognitive/Comprehension | NK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | II | |
| **Topic 14.Anasir ki Tareef, Aqsam, Kaifiyyaat-o-Mizaaj (Ijmali Bayan)**. (Lecture:- **1** hour, Non lecture **2** hours) | | | | | | | | | |
| CO9, 10 | Define Anasir and enumerate them in view of the different Unani philosophers. | Cognitive/Recall | MK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |
| CO9 | Evaluate the four-ness of Anasir in the Unani medicine. | Cognitive/Comprehension Affective/Valuing | MK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| CO9 | Describe the Kaifiyyat-e-Arba'ah. | Cognitive/Recall | DK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| CO9 | Give the brief introduction of Mizaj. | Cognitive/Recall | DK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |

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|---|---|---|---|---|---|---|---|---|---|
| **Topic 15**. **Kaun-o-Fasad, Murakkabat-e-Naqisa ki Tareef mae Amsal, Murakkabat-e-Tammah, Jamadat, Nabatat. wa Nafse Nabati, Nafse Haiwani, Nafse Natiqah aur unke matehat kaam karne wali Quwwatein**.<br>(Lecture:- **5** hours, Non lecture **10** hours) | | | | | | | | | |
| CO9,10 | Define Kaun-o-Fasad and enumerate 6 forms of Inqilab-e-Anasir | Cognitive/Recall | DK | Knows | Lecture, E-learning. | Written/Viva | F & S | III | |
| CO9 | Describe difference of opinions between the Unani philosophers regarding Inqilab-e-Anasir. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| CO9 | Evaluate the correct opinion on the basis of argumentation. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |
| CO9 | Define Murakkab-e-Unsuri, and distinguish between Tam and Naqis describing the characteristics of both. | Cognitive/Comprehension | MK | Knows how | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| CO9 | Identify Murakkabat-e-Naqisah of Dukhan and Bukhar and enumerate their instances inside the earth and those in the space. | Cognitive/Comprehension | DK | Knows how | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |
| CO9 | Define Murakkabat-e-Tammah specifying their characteristics. | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. | Written/Viva | F & S | III | |
| CO9 | Define Jamadat and identify Nabatat and all the faculties (Quwa) responsible for their growth and how they function. | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| CO9 | Define Haiwanat and identify the faculties responsible for their perception and motion (Quwa Mudrikah and Muharrikah). | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |
| CO9 | Define Insan and Nafs-e-Natiqah, and identify the different philosophical opinions regarding its reality. | Cognitive/Comprehension | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |

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|---|---|---|---|---|---|---|---|---|---|
| CO9 | Identify Quwwat-e-Aqilah and Quwwat-e-Amilah and the hierarchical grades of Quwwat-e-Aqilah. | Cognitive/Comprehension | NK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| **(Hay'at)**<br><br>**Topic 16**. **Ilm-e-Hay'at ki Tareef, aur Tibb se uska Ta'alluq**. (Lecture:- **1** hour, Non lecture **1** hour) | | | | | | | | | |
| CO11,12 | Define Ilm-e-Hay'at and describe its connection with Ilm-e-Tibb. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |
| **Topic 17**. **Kurah, Qutbain, Khatte Sartan, Khatte Jaddi, Khatte Istiwa, Mintaqatul Burooj**. (Lecture:- **1** hour. Non lecture **2** hour) | | | | | | | | | |
| CO12 | Define the astronomical terms like Kurah, Qutbain, Khatte Sartan, Khatte Jaddi, Khatte Istiwa, Mintaqatul Burooj. | Cognitive/Recall | MK | Knows | Lecture, E-learning, Presentation of pictures and video clips. | Written/Viva | F & S | III | |
| **Topic 18**. **Dairah Muaddilun Nahar, Dairah Nisf-un- Nahar**. (Lecture:- **1** hour, Non lecture **1** hour) | | | | | | | | | |
| CO12 | Define the astronomical terms like Dairah Muaddilun Nahar, Dairah Nisf-un- Nahar | Cognitive/Recall | MK | Knows | Lecture, E-learning, Presentation of pictures and video clips. | Written/Viva Quiz | F & S | III | |
| **(Ibtedai Ilm-un-Nafs)**<br><br>**Topic 19**. **Ilm-un-Nafs ki Tareef-o-Aqsam**. (Lecture:- **1** hour, Non lecture **2** hour) | | | | | | | | | |
| CO13 | Define Ilm-un-Nafs and describe the evolutionary changes in its definition. | Cognitive/Recall | MK | Knows | Lecture, E-learning. Tutorial. | Written/Viva | F & S | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO13 | Enumerate some of the most famous branches of Psychology. | Cognitive/Recall | DK | Knows | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |
| **Topic 20**. **Ilm-un-Nafs aur Ilm-e-Tibb ka Bahami Rabt. Ehsas, Idrak, Mushahidah, aur Tawajjuh ka Ta'arruf**. (Lecture:- **1** hour. Non lecture **2** hour) | | | | | | | | | |
| CO13 | Explain the mutual connection between Ilm-un-Nafs and Tibb. | Cognitive/Comprehension Affective/Valuing | MK | Knows how | Lecture, E-learning. Tutorial. | Written Quiz/ Viva | F & S | III | |
| CO13 | Define some important psychological terms like Ehsas, Idrak, Mushahida and Tawajjuh. | Cognitive/Recall | DK | Knows | Lecture, E-learning. Group Discussion. | Written/Viva | F & S | III | |

**Table 4 Learning objectives (Practical) Not applicable**

**Table 5- Non Lecture Activities Course Urdu,Arabic and Mantiq wa Falsafa <UNIUG-UAMF>-**

| Sr No | List non lecture Teaching-Learning methods | No of Activities |
|---|---|---|
| 1 | Team Based Learning | 24 |
| 2 | Group discussions | 40 |
| 3 | Peer Assisted Learning | 12 |
| 4 | Tutorials | 33 |
| 5 | Problem Solving method | 19 |
| 6 | Bilingual method | 11 |
| 7 | Total Physical Response | 1 |
| 8 | Audio Lingual method | 5 |
| 9 | Simulation | 2 |
| 10 | Presentation of Pictures and Video Clips | 2 |
| 11 | Natural Approach | 5 |
| 12 | Structural Approach | 16 |
| 13 | Communicative Approach | 10 |
| 14 | **Total** | **180** |

**Table 6: Assessment Summary**

## 6 A - Number of papers and Marks Distribution

| S. No. | Subject | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Practical or clinical | VIVA | Electives | IA | Total | |
| 1 | **Urdu, Arabic and Mantiq wa Falsafa (Urdu, Arabic, Logic and Philosophy) Paper I – Urdu and Arabic Paper II - Mantiq wa Falsafa** | 2 | 200 | - | 30 | - | 20 | 50 | 250 |

## 6. B - Scheme of Assessment (formative and Summative)

| SR.NO. | PROFESSIONAL COURSE | DURATION OF PROFESSIONAL COURSE | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First | 3 PA & First TT | 3 PA & Second TT | 3 PA & UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

## 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 | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 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. | Other activities explained in Table 3 Column G3 as per indicated term. |

## 6 E - Question Paper Pattern

**I PROFESSIONAL BUMS EXAMINATIONS**
**UNIUG-UAMF**

**PAPER-I**

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 |

**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 (1) - Distribution of Theory examination (Paper I – Urdu and Arabic)

| | **A**<br>**List of Topics** | **B**<br>**Term** | **C**<br>**Marks** | **D**<br>**Type of Questions**<br>**"Yes" can be asked.**<br>**"No" should not be asked.** | | |
|---|---|---|---|---|---|---|
| | | | | **MCQ (1Mark)** | **SAQ (5 Marks)** | **LAQ (10 Marks)** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | حروف تہجی، حروف کی مفرد اور مرکب شکلیں، حروف کی ابتدائی، درمیانی اور آخری شکلیں، ہکاری شکلیں، ہم صوت حروف، مصوتے اور مصمتے، حروف کی اقسام۔ ربط، عطف، تخصیص، فجائیہ، واو معدولہ، واو عطف، کھڑا الف، الف مقصورہ، الف ممدودہ، الف وصل۔<br>اعراب، تنوین، تشدید، مد، حرف جزا، حرف شرط، حرف استثناء۔<br>Huroof-e-Tahajji, Huroof ki Mufrad aur Murakkab Shaklen, Huroof ki Ibtidai, darmiyani aur Akhri Shaklen, Hakari shaklen, Ham Saut Huroof, Musawwate aur musammate, Huroof ki Aqsaam-Rabt, Atf, Takhsees, Fujaiyyah, Waw Madoola, waw Atf, Khada Alif, Alif Maqsoora, Alif Mamdooda Alif wasl. Erab, Tanween, Tashdeed, Mad, Harfe Jaza, Harfe Shart, Harfe Istisna. | I | 0 | No | No | No |
| **2** | لفظ (کلمہ)، مادہ، اشتقاق، دو حرفی لفظ، سہ حرفی لفظ، چہار حرفی لفظ، اسم اور اس کی قسمیں۔ فعل اور اس کی حالتیں۔ ضمیر اور اس کی قسمیں۔ صفت اور اس کی قسمیں۔ قواعد:<br>1-مفرد لفظ (Simple word) 2-پیچیدہ لفظ (Complex word)<br>3-مرکب الفاظ (Compound words) ترادفی مرکب، مرکبات ربطی، مرکبات توصیفی، مرکبات اعدادی<br>4-تابع مہمل 5-اضافت 6-تثنیہ–واحد/جمع 7-تذکیر و تانیث (جنس) 8-اضداد 9-سابقے اور لاحقے۔<br>Lafz (Kalma)- Maddah – Ishtiqaq – Do Harfi Lfz, She Harfi Lafz, Chahaar Harfi Lfz- Ism aur Uski Qismen- Fe'l aur uski Halaten- Zameer aur uski Qismen- Sifat aur uski Qismen. Qawaid: Mufrad Lafz- Pecheeda Lafz-Murakkab Lafz- Taradufi Murakkab, Murakkabate Rabti, Murakkabate Tauseefi, Murakkabate Adadi- Tabe Muhmal, Izafat, Tasniya, Wahid/Jama, Tazkeer wa Tanees (Jins), Azdaad, Sabqe aur Laheqe. | I | 5 | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| **3.** | مستقل الفاظ کی قسمیں: 1-اسم 2-صفت 3-ضمیر 4-فعل 5-تمیز-<br>اسم کی اقسام: 1-اسم خاص 2-اسم عام<br>اسم عام کی اقسام: 1-اسم کیفیت 2-اسم جمع 3-اسم ظرف 4-اسم آلہ<br>صفت کی اقسام: 1-صفت ذاتی 2-صفت نسبتی 3-صفت عددی 4-صفت مقداری 5-صفت ضمیری<br>ضمیر کی اقسام: 1- شخصی 2-موصولہ 3-استفہامیہ 4-اشارہ 5– تنکیر<br>Mustaqil Alfaaz ki qismen: Ism, Sifat, Zameer, Fe'l, Tameez, Ism ki Aqsaam: Ism Khas, Ism Aam, Ism Aam ki Aqsaam: Ism kifiyat, Ism Jama, Isme Zarf, Ism Aala, Sifat ki Aqsaam : Sifat Zati, Safat Nisbti, Sifat Adadi, Sifat Miqdaari, Sifat Zameeri, Zameer ki Aqsaam: Shakhsi, Mausoola, istifhamiya, Ishara, Tankeer. | I | 5 | Yes | Yes | No |
| **4.** | فعل کے زمانے: 1-ماضی 2-حال 3- مستقبل<br>معنی کے اعتبار سے فعل کی حالتیں: 1-لازم 2-متعدی 3-ناقص<br>فعل کی صورتیں: 1-خبری 2-شرطی 3-احتمالی 4-امری 5-مصدری<br>فعل کے صیغے: 1-غائب 2-حاضر 3-متکلم<br>افعال ماضی کی اقسام: ماضی مطلق، ماضی ناتمام، ماضی تمام، ماضی شرطیہ، ماضی تمنائی، ماضی احتمالی<br>افعال حال کی اقسام: مضارع، امر، حال مطلق، حال ناتمام، حال احتمالی<br>افعال مستقبل کی اقسام: مستقبل مطلق، مستقبل مدامی۔<br>غیر مستقل الفاظ کی قسمیں: 1-ربط 2-عطف 3- تخصیص 4-فجائیہ<br>Fe'l ke Zamane: Mazi, Hal, Mustaqbil, Fe'l ki Halaten Mana ke Etebar se:lazim, Muta'addi, Naqis, Fe'l ki Surten: Khabari, Sharti, Ehtemali, Amri and Masdari, Fe'l ke Seghe: Ghaib, Hazir, Mutakallim, Afaal Mazi ki Aqsaam: Mazi Mutlaq, Mazi Natamaam, Mazi Tamaam, Mazi Shartiya, Mazi Tamannai, Mazi Ehtemali, Afaal Hal ki Aqsaam: Muzare, Amr, Hal Mutlaq, Hal Natamaam, Hal Ehtemali, Aafaal Mustaqbil ki Aqsaam: Mustaqbil Mutlaq, Mustaqbil Madaami.<br>Ghair Mustaqil Alfaaz ki Qismen: Rabt, Atf, Takhsees, Fujaiyah. | I | 5 | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| **5.** | جملہ:<br>ف- مفرد جملہ: مبتدا، خبر، فعل ربط<br>2-مرکب جملہ: ہم رتبہ جملہ، تابع جملہ، استدراکی جملہ، تردیدی جملہ<br>علامات: اوقاف یا وقفہ، سکتہ، رابطہ، تفصیلہ، ختمہ، سوالیہ، فجائیہ یا ندائیہ، قوسین، خط، واوین، زنجیرہ۔<br>Jumla: Mufrad Jumla- Mubtada, Khabar, Fe'le Rabt.<br>Murakkab Jumla: Ham Rutba Jumla, Tabe Jumla, Istidraki Jumla, Tardeedi Jumla,<br>Alaamaat: Auqaaf ya Waqfa, Sakta, Waqfa, Rabta, Tafseela, Khatma, Sawalia, Fujaiya, ya Nidaiya, Qousain, Khat, Wawain, Zanjeerah. | I | 10 | Yes | Yes | Yes |
| **6.** | نظم ونثر کے چند منتخب ابواب (غزل، الٹی ہو گئیں سب تدبیریں - میر تقی میر، دل ناداں تجھے ہوا کیا ہے - اسداللہ خاں غالب، ترانۂ ہندی - علامہ اقبال، نظم رات - اسماعیل میرٹھی، آوارہ — مجاز، غالب کا خط میر مہدی کے نام، ناظم جہاں حکیم محمد اعظم خاں، مسیح الملک حکیم اجمل خان، ورزش کے طریقے اور ہدایات، طبّی اشعار، مرثیہ حکیم محمود خاں - الطاف حسین حالی، طب کا تاریخی خاکہ - کمال الدین ہمدانی، رسوم وعادات - سرسید، عیدگاہ - پریم چند، قصۂ حاتم طائی - میر امّن)<br>Nazm-o-Nasr ke Chand Muntakhab Abwab: (Ghazal: Meer- Ulti Ho Gain Sab Tadbeeren, Ghalib- Dile Nadan Tujhe Huwa kiya Hai, Tarana Hindi- Allama Iqbal, Nazm: Raat- Ismail Merathi,Aawarah- Majaz, Khat Mir Mehdi ke Naam-Ghalib, Nazime Jahan Hakeem Azam Khan, Hakeem Ajmal Khan, Warzish ke Tareeqe aur Hidayaat, Tibbi Ash'aar, Marsiya Hakeem Mahmood Khan- Altaf Husain Haali, Tib ka Tareekhi Khaaka- Kamaluddin Hamdani, Rusoom wo Aadaat- Sir Syed, Eidgaah- Prem Chand, Qissa Hatim Tai- Meer Amman) | I | 10 | Yes | Yes | Yes |
| **7.** | حروفِ ہجاء، حروف شمسیہ وقمریہ، اسماء حرکات واعداد۔<br>Huroof-e-Hija, Huroof-e-Shamsiyyah, wa Qamariyyah, Asma-e- Harakaat –o-A'adad.<br>(Arabic Alphabet, Solar and Lunar Letters, Arabic Vowels and Numerals.) | II | 0 | No | No | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| **8.** | کلمہ اور اس کی اقسام، اسم، فعل، حرف۔<br>Kalimah aur uski Aqsam Ism, Fe'l, Harf.<br>(Word and its kinds, Noun, Verb, Particle). | II | 10 | Yes | Yes | No |
| **9.** | اسم کی تقسیم بلحاظ تعریف و تنکیر، بلحاظ جنس، بلحاظ عدد۔<br>Ism ki Taqseem balehaz-e- Tareef-o-Tamkeer, balehaz-e-Jins, balehaz-e-Adad.<br>(Kinds of Noun according to definition like (Definite noun, Indefinite noun), Gender, and Number). | II | | Yes | Yes | Yes |
| **10.** | مرکب اور اس کی اقسام۔<br>Murakkab aur uski aqsam.<br>(Compound word and its kinds). | II | 10 | Yes | No | No |
| **11.** | مرکب ناقص: مرکب اضافی، مرکب توصیفی، مرکب اشاری۔<br>Murakkab-e-Naqis: Murakkab-e-Izafi, Murakkab-e-Tauseefi, Murakkab-e-Ishari.<br>(Incomplete Compound: Possessive Compound, Adjectival Compound, Demonstrative Compound). | II | | Yes | Yes | Yes |
| **12.** | مرکب تام یا کلام: جملہ اسمیہ، جملہ فعلیہ۔<br>Murakkab-e-Taam ya Kalam, Jumlah Ismiyyah, Jumlah Fe'liyyah.<br>(Complete Murakkab, or Sentence, Nominal Sentence, Verbal Sentence). | II | | Yes | Yes | Yes |
| **13.** | فعل اور اس کی اقسام باعتبار زمانہ: ماضی، حال، مستقبل۔<br>Fe'l aur uski Aqsam ba etebar-e-Zamana: Mazi, Hal, Mustaqbil.<br>(Verb and its kinds according to Tense: Past, Present and Future). | II | | Yes | Yes | No |
| **14.** | گردان ماضی اور اس کے صیغے۔<br>Gardan-e-Mazi aur uske Seeghe.<br>(Conjugation of Past tense and its Moods) | II | 15 | Yes | Yes | Yes |
| **15.** | گردان مضارع اور اس کے صیغے۔<br>Gardan-e-Muzare aur uske Seeghe.<br>(Conjugation of Indefinite Present and Future Tense and its Moods). | II | | Yes | Yes | Yes |
| **16.** | فعل ثلاثی مجرّد اور اس کے ابواب۔<br>Fe'l-e-Sulasi Mujarrad aur uske Abwab.<br>(Triliteral Primitive Verb and its Patterns). | II | | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| **17.** | فعل ثلاثی مزید اور اس کے ابواب۔<br>Fe'l-e-Sulasi Mazeed aur uske Abwab<br>(Triliteral Derived Verb and its Patterns). | II | | Yes | Yes | Yes |
| **18.** | فعل رباعی مجرّد و مزید۔<br>Fe'l-e-Rubaee Mujarrad wa Mazeed.<br>(Quadriliteral Verb, Primitive and Derived) | II | | Yes | No | No |
| **19.** | تقسیم فعل ماضی و مضارع باعتبار معروف و مجہول۔<br>Taqseem-e- Fe'l-e- Mazi-o- Muzare ba etebar-e Maroof-o- Majhool.<br>(Division of Past and Indefinite Present Tense according to Active and Passive). | II | | Yes | Yes | No |
| **20.** | گردان فعل امر و نہی۔<br>Gardan-e- Fe'l-e Amr-o- Nahi.<br>(Conjugation of Imperative and Prohibitive Verb). | II | | Yes | Yes | Yes |
| **21.** | تقسیم اسم: جامد، مصدر و مشتق، اسم فاعل، اسم مفعول، اسم ظرف، اسم آلہ، اسم تفضیل، اسم مبالغہ، اسم تصغیر و صرف صغیر۔<br>Taqseem-e-Ism: Jamid, Masder wa Mushtaq, Ism-e-Fa'el, Ism-e- Mafool, Ism-e- Zarf, Ism-e-Alah, Ism-e- Tafzeel wa Ism-e- Mubalaghah, Ism-e- Tasgheer wa Sarfe Sagheer.<br>(Division of Noun: Primitive, Infinitive and Derivative, Active Participle, Passive Participle, Noun of Place and Time, Noun of Tool, Comparative and Superlative Noun and Exaggerative Noun, Diminutive Noun, and Small Conjugation) | III | 15 | Yes | Yes | Yes |
| **22.** | اعراب: تعریف و تقسیم، اعراب بالحروف، اعراب بالحرکات۔<br>Ierab, Tareef-o-Taqseem, Ierab bil Huroof, Ierab bil Harakat.<br>(Inflection Sign, its definition and division: by letters and by signs). | III | 05 | Yes | Yes | No |
| **23.** | مرفوعات، منصوبات، مجرورات۔<br>Marfooat, Mansoobat, Majroorat.<br>(Nominative Cases, Accusative Cases, Genitive Cases). | III | | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| **24.** | ضمائر مرفوعہ، ضمائر مجرورہ، ضمائر منصوبہ، اسماء اشارہ، اسماء استفہام، اسماء موصولہ۔<br>Zamair Marfooah, Majroorah-o-Mansoobah, Asma-e- Isharah, Asma-e-Istifham, Asma-e-Mausoolah.<br>(Pronouns in Nominative, Accusative and Genitive Cases, Demonstrative Pronouns, Interrogative Pronouns, Relative Pronouns). | III | | Yes | Yes | No |
| **25.** | عربی طبّی اصطلاحات والفاظ کا جملوں میں استعمال۔<br>Arabi Tibbi Istilahat-o-Alfaz ka Jumlon me Istemal.<br>(Arabic Medical words and Terms and their uses in sentences). | II | 10 | Yes | Yes | Yes |
| | (i) اسماء اعضاء انسان ورطوبات بدن۔<br>Asma-e-Aza-e-Insan wa Rutoobat-e-Badan.<br>(Names of the Organs of Human Body and Body Fluids) | | | | | |
| | (ii) اسماء امراض۔<br>Asma-e-Amraz<br>(Names of the Diseases) | | | | | |
| | (iii) اسماء آلات۔<br>Asma-e-Alaat<br>(Names of the Instruments and Equipments) | | | | | |
| | (iv) اسماء ادویہ۔<br>Asma-e-Advia<br>(Names of Drugs) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (v) طبّی اشعار۔<br><br>Tibbi Ash'aar (verses of Unani Tibb)<br>الطِّبُ حِفظُ صِحَّةٍ وبَرْءُ مَرَضٍ * مِنْ سَبَبٍ فی بَدَنٍ مُنْذُ عَرَضٍ<br>قِسْمَتُهُ الأولیٰ بِعِلْمٍ وَعَمَلْ * وَالعِلْمُ فِي ثَلَاثَةٍ قَدِ اكْتَمَلْ<br>سَبْعُ طَبیعَاتٍ مِنَ الأُمُورِ * وَسِتَّةٌ وَكُلُّهَا ضَرُورِی<br>ثُمَّ ثَلاثَةٌ سُطِرَتْ فِی الْكُتُبْ * مِنْ عَرَضٍ وَ مَرَضٍ وَ سَبَبٍ<br>وَعَمَلُ الطِّبِ عَلیٰ ضَرْبَیْنِ * فَوَاحِدٌ یُعْمَلُ بِالْیَدَیْنِ<br>وَغَیْرُهُ یُعْمَلُ بِالدَّوَاءِ * وَمَا یُقَدَّرُ مِنَ الْغِذاءِ<br>فَغَرْغِرَنْ وَاسْتَعْمِلِ السِّواكا * تُنَظِّفِ الْأَسْنانَ والْأَحْناكا<br>لا تأخُذِ الْماءَ عَلَی الطَّعامِ * ولا عَلَی الْخُرُوْجِ مِن حَمّامِ<br>وَالصَّدْرُ وَالرِّیَةُ آلاتُ النَّفْسِ * فَإِن تَصِحَّ فَالْحَیاةُ فِي حَرَسْ<br>وَاسْتَعْمِلِ الْحَمّامَ لِلْأوساخِ * وَلا تَكُنْ مِنْ ذاكَ فِي تَراخِ<br>وَالْجِسْمُ یَحْتاجُ إِلی الْإِسْتِفْراغِ * مِنْ سائرِ الْأَعْضاءِ وَالدِّماغِ<br>أَمّا الرِّیاضاتُ فَمِنْها مُعْتَدِلٌ * وَیَنْبَغِيْ لِمِثْلِ ذا أَنْ نَمْتَثِلَ<br>فَإِنَّها تُعْدِلُ الْأَبْدانَا * تُخْرِجُ الْأَثْقالَ وَالْأَدْرانا<br>مِنْ بَلْغَمٍ وَمِرَّةٍ صَفْراءَ * وَمِنْ دَمٍ وَمِرَّةٍ سَوْداءَ<br>اَلْجِسْمُ مَخْلُوْقٌ مِنَ الْأَمْشاجِ * مُخْتَلِفاتِ اللَّوْنِ وَالْمِزاجِ<br>ما قَهَرَ الْجِسْمَ فَمِنْ دَواءٍ * مِنْها وَما أَنْمیٰ فَمِنْ غِذاءِ | | | | | |

## 6 F (2) - Distribution of Theory examination (Paper II - Mantiq wa Falsafa)

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ (1Mark) | SAQ (5 Marks) | LAQ (10 Marks) |
| 1 | تعریف، موضوع اور غرض وغایت۔<br>Tareef, Mauzu, aur Gharaz-o- Ghayat.<br>(Definition, Aims and Objectives). | I | 10 | Yes | Yes | No |
| 2 | علم اور ادراک، اقسام علم، تصور و تصدیق اور ان کی اقسام۔<br>Ilm aur Idrak, Aqsam-e- Ilm, Tasawwur-o- Tasdeeq aur unki Aqsam.<br>(Knowledge and Perception, Kinds of Knowledge, Imagination and Judgement and their classification). | I | | Yes | Yes | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| **3** | معرف یا قول شارح، دلیل یا حجت۔<br>Mu'arrif ya Qawl-e- Shaareh, Daleel ya Hujjat.<br>(Definer or Explanatory Statement, Evidence or Argument) | I | 15 | Yes | Yes | No |
| **4** | دلالت کی تعریف و تقسیم، لفظ کی تعریف و تقسیم۔<br>Dalaalat ki Tareef-o- Taqseem, Lafz ki Tareef-o-Taqseem.<br>(Denotation: its definition and classification, Word: its definition and classification). | I | | Yes | Yes | Yes |
| **5** | مفہوم مجزئی و کلی مع اقسام، نِسب اربعہ۔<br>Mafhoom-e- Juzi wa Kulli mae Aqsam, Nisab-e-Arba'ah.<br>(Conception, Specific/Particular and general and their kinds, Four Relations) | I | 15 | Yes | Yes | Yes |
| **6** | قضایا: قضیہ حملیہ کی جملہ اقسام، قضیہ شرطیہ کی دو قسمیں: متصلہ و منفصلہ۔<br>Qazaya: Qaziyyah Hamliyyah ki jumla Aqsam, Qaziyyah Shartiyyah ki dow Qismen: Muttasilah-o-Munfasilah.<br>(Propositions, Clause and its kinds, Conditional Clause and its two kinds viz. Attached and Detached Clause). | II | 5 | Yes | Yes | No |
| **7** | تناقض، وحدات ثمانیہ اور عکس۔<br>Tanaquz, Wehdaat-e- Samaniyah, and Aks<br>(Contradiction, its eight Unities, and Reversion) | II | 10 | Yes | Yes | Yes |
| **8** | حجت کی اقسام، قیاس، تمثیل، قیاس کی قسمیں۔<br>Hujjat ki Aqsam, Qiyas, Istiqra, Tamseel, Qiyas ki Qismein.<br>(Division of Arguments, Analogy, Induction, Allegory, and Kinds of Analogy). | II | | Yes | Yes | Yes |
| | **Falsafa (Philosophy)** | | | | | |
| **9** | حکمت، تعریف و تقسیم، موضوع اور غرض و غایت۔<br>Hikmat, Tareef-o- Taqseem, Mauzu aur Gharaz-o-Ghayat.<br>(Philosophy, its Definition and kinds, Aims and objectives). | II | 20 | Yes | Yes | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| **10** | جسم، جسم طبعی، جسم تعلیمی، ہیولیٰ، صورت جسمیہ، صورت نوعیہ کی تعریف۔<br>Jism, Jism-e- Taba'i, Jism-e- Taleemi, Heula, Surat-e- Jismiyyah, Surat-e- Nauiyyah ki Tareef.<br>(Body, Physical Body, Educational Body, Matter, Shape, Definition of Body Shape and Species Shape). | II | | Yes | Yes | No |
| **11** | مکان، حیّز اور شکل کی تعریف۔<br>Makan, Hayyiz aur Shakl ki Tareef.<br>(Definition of Space, Locus and Shape). | II | | Yes | Yes | Yes |
| **12** | حرکت وسکون کی تعریف، غرض وغایت، اقسام وشرائط۔<br>Harakat wa Sukoon ki Tareef, Gharaz-o- Ghayat, Aqsam-o- Sharaayit.<br>(Motion and Rest, their Definitions, Aims and Objectives, Kinds and Conditions). | II | | Yes | Yes | Yes |
| **13** | مقولات عشر، زمانہ کی تعریف وتوضیح۔<br>Maqoolat-e- Ashar, Zamanah ki Tareef-o- Tauzeeh.<br>(Ten Categories, Definition of Time and its explanation). | II | 10 | Yes | Yes | Yes |
| **14** | عناصر کی تعریف، اقسام، کیفیات ومزاج (اجمالی بیان)۔<br>Anasir ki Tareef, Aqsam, Kaifiyyaat-o-Mizaaj.<br>(Definition of Elements, Kinds, Conditions and Temperament (With brief description). | III | | Yes | Yes | No |
| **15** | کون وفساد، مرکبات تامہ، جمادات، نباتات، نفس نباتی، نفس حیوانی، نفس ناطقہ اور ان کے ماتحت کام کرنے والی قوتیں، مرکبات ناقص کی تعریف مع امثال<br>Kaun-o- Fasad, Murakkabat-e- Tammah, Jamadat, Nabatat. Wa Nafse Nabati, Nafse Haiwani, Nafse Natiqah aur unke matehat kaam karne wali Quwwatein, Murakkabat-e- Naqisa ki Tareef mae Amsal.<br>(Anabolism and Catabolism, Complete Compounds, Minerals, Plants and Botanical Being, Animal Soul, Human Soul and Faculties working under them. Definition of Incomplete Compounds along with examples). | III | | Yes | Yes | Yes |
| | **Hay'at (Astronomy)** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **16** | علم ہیئت کی تعریف اور طب سے اس کا تعلق۔<br>Ilm-e- Hay'at ki Tareef, aur Tib se uska Ta'alluq.<br>(Definition of Astronomy and its relation with Medicine). | III | 10 | Yes | Yes | No |
| **17** | کرہ، قطبین، خط سرطان، خط جدی، خط استواء، منطقۃ البروج۔<br>Kurah, Qutbain, Khatte Sartaan, Khatte Jaddi, Khatte Istiwa, Mintaqatul Burooj.<br>(Globe, Earth Poles, Tropic of Cancer, Tropic of Capricorn, Equator, Zodiac Line). | III | | Yes | Yes | No |
| **18** | دائرہ معدلالنہار، دائرہ نصف النہار۔<br>Dairah Muaddilun Nahar, Dairah Nisf-un- Nahar.<br>(Meridian Circle, Mid-Day Circle). | III | | Yes | No | No |
| | **Ibtedai Ilm-un-Nafs (Elementary Psychology)** | | | | | |
| **19** | علم النفس کی تعریف واقسام۔<br>Ilm-un-Nafs ki Tareef-o- Aqsam.<br>(Psychology, its Definitions and Kinds). | III | 5 | Yes | Yes | No |
| **20** | علم النفس اور علم طب کا باہمی ربط، احساس، ادراک، مشاہدہ اور توجہ کا تعارف۔<br>Ilm-un-Nafs aur Ilm-e- Tib ka Bahami Rabt. Ehsas, Idrak, Mushahidah, aur Tawajjuh ka ta'arruf.<br>(Description of Interrelation between Psychology and Medicine. Introduction of Feelings, Perception, Observation and Attention). | III | | Yes | Yes | No |

**6 G (1)- Question Paper blueprint (Paper I – Urdu and Arabic)**

| **A**<br>**Question Sr. No** | **B**<br>**Type of Question** | **C**<br>**Question Paper Format** |
|---|---|---|

| | | |
|---|---|---|
| .Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number 2<br>2. Topic number 2<br>3. Topic number 3<br>4. Topic number 3<br>5. Topic number 4<br>6. Topic number 4<br>7. Topic number 5<br>8. Topic number 5<br>9. Topic number 6<br>10. Topic number 6<br>11. Topic number 8<br>12. Topic number 9<br>13. Topic number 10/ Topic number 11<br>14. Topic number 12/ Topic number 13<br>15. Topic number 14/ Topic number 15/ Topic number 16/ Topic number 17<br>16. Topic number 18/ Topic number 19/ Topic number 20<br>17. Topic number 21<br>18. Topic number 22/ Topic number 23/ Topic number 24<br>19. Topic number 25<br>20. Topic number 25 |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic No.2 / Topic No.5<br>2. Topic No.3 / Topic No.6<br>3. Topic No.4<br>4. Topic no.8 / Topic no.9<br>5. Topic no.11 / Topic no.12 / Topic no.13<br>6. Topic no.14/ Topic no.15/ Topic no.16/ Topic no.17/ Topic no.19 / Topic no.20<br>7. Topic no.21/ Topic no.25<br>8. Topic no.22/ Topic no.23/ Topic no.24 |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br><br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic No.5/ Topic No.6<br>2. Topic No.9 / Topic No. 25<br>3. Topic no.11/ Topic no.12/ Topic no.21<br>4. Topic no.14/ Topic no.15/ Topic no.17/ Topic no.20 |

**6 G (2)- Question Paper blueprint(Paper II – Mantiq wa Falsafa)**

| Question Sr. No | B<br>Type of Question | Question Paper Format |
|---|---|---|
| .Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number 1<br>2. Topic number 2<br>3. Topic number 3<br>4. Topic number 4<br>5. Topic number 5<br>6. Topic number 6<br>7. Topic number 7<br>8. Topic number 8<br>9. Topic number 9<br>10. Topic number 10<br>11. Topic number 11<br>12. Topic number 12<br>13. Topic number 13<br>14. Topic number 14<br>15. Topic number 15<br>16. Topic number 16<br>17. Topic number 17<br>18. Topic number 18<br>19. Topic number 19<br>20. Topic number 20 |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic no.1 / Topic no.2<br>2. Topic no.3/ Topic no.4<br>3. Topic no.5/ Topic no.6/ Topic no.7<br>4. Topic no.8/ Topic no.9<br>5. Topic no.10/ Topic no.11/ Topic no.12<br>6. Topic no.13/ Topic no.14/ Topic no.15<br>7. Topic no.16/ Topic no.17<br>8. Topic no.19/ Topic no.20 |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br><br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic no.2/ Topic no.4<br>2. Topic no.5/ Topic no.7<br>3. Topic no.8/ Topic no.9/ Topic no.11<br>4. Topic no.12/ Topic no.13/ Topic no.15 |

6 H - Distribution of Practical Examination

| SN | Heads | Marks |
|---|---|---|
| 1 | Viva Voce | 30 |
| 2 | Internal | 20 |
| 3 | Electives | -- |
| | **Total Marks** | **50** |

## Table 7. Reference books/ Resources:

| S.No. | Name of Book | Name of Author |
|---|---|---|
| | Urdu | |
| 1 | Intikhabe Adab Barae Tibb wo Hikmat<br>انتخاب ادب برائے طب و حکمت | Aftab Alam Najmi<br>آفتاب عالم نجمی |
| 2 | Urdu Imla<br>اردو املا | Rasheed Hasan Khan<br>رشید حسن خاں |
| 3 | Urdu Qawaid<br>اردو قواعد | Molvi Abdul Haq<br>مولوی عبدالحق |
| 4 | Urdu Kaise Likhen<br>اردو کیسے لکھیں | Rasheed Hasn Khan<br>رشید حسن خاں |
| 5 | Intikhabe Manzoomat, Ghazaliyat, Nasr<br>انتخاب منظومات، غزلیات، نثر | Utter Pradesh Urdu Academy<br>اتر پردیش اردو اکیڈمی |
| | Arabic | |
| 6 | Tibbi Arabi Reader<br>طبی عربی ریڈر | Raziul Islam Nadwi<br>رضي الاسلام ندوی |
| 7 | Mu'allimul Inshaa<br>معلّم الانشاء | Abdul Majid Nadwi<br>عبد الماجد ندوی |
| 8 | Asbaqun Nahv (Vol. I, II)<br>اسباق النحو (حصہ اول و دوم) مع تحفۃ الاعراب | Allama Hameeduddin Farahi<br>علامہ حمید الدین فراہی |
| 9 | Kitabun Nahv<br>کتاب النحو | Abdur Rahman Amritsari<br>عبدالرحمان امرتسری |
| 10 | Kitabus Sarf<br>کتاب الصرف | Abdur Rahman Amritsari<br>عبدالرحمان امرتسری |
| 11 | Annahul Wazeh fil Qawaidil lughatil Arabia<br>النحو الواضح فی قواعداللغۃ العربیۃ<br>(الجزء الأول والثاني والثالث) | Ali al-Jarim and Mustafa Ameen<br>علی الجارم و مصطفٰی امین |
| 12 | Tamreenun Nahv<br>تمرین النحو | Moinullah Nadvi<br>معین اللہ ندوی |
| 13 | Tamreenus Sarf<br>تمرین الصرف | Mustafa Nadvi<br>مصطفی ندوی |
| 14 | Droos-ul-Lugha Al-Arabiyah<br>دروس اللغة العربية | V. Abdur Raheem<br>ف. عبد الرحيم |
| 15 | Minhaaj-ul-Arabiyah<br>منہاج العربیہ | Syed Nabi Hydarabadi<br>سید نبی حیدرآبادی |

| | | |
|---|---|---|
| 16 | Al-Jauharun-Nafees fi Sharh Arjuzat Ash-Shaikh Ar-Raiees<br>الجوهر النفيس فی شرح ارجوزة الشیخ الرئیس | Hakeem Abu Abdul Azeez<br>حکیم ابو عبدالعزیز بٹالوی |
| 17 | Online General/Medical Arabic dictionary. | |
| | Mantiq wa Falsafa | |
| 18 | Mabadiyaat Mantiq wa Falsafa<br>مبادیات منطق وفلسفہ | Hakeem Taskheer Ahmad<br>حکیم تسخیر احمد |
| 19 | Taiseer-ul Mantiq<br>تیسیر المنطق | Maulana Abdullah<br>مولانا عبد اللہ |
| 20 | Tas'heel-ul Mantiq<br>تسہیل المنطق | Maulana Qari Siddiq<br>مولانا قاری صدیق |
| 21 | Mabaadi'al-Falsafa<br>مبادئ الفلسفه | Mufti Saeed Ahmad Palanpuri<br>مفتی سعید احمد پالنپوری |

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS (PRESCRIBED BY NCISM)

## KULLIYAT UMOORE TABIYA
## SUBJECT CODE: UNIUG-KUT
## BASIC PRINCIPLES OF UNANI MEDICINE

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

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**BOARD OF UNANI, SIDDHA AND SOWA RIGPA**
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SCAN ME

UNIUG-KUT

| | | |
|---|---|---|
| | Kitāb Al Murshid (The Guide) (English translation) | Hakim Wasim Ahmad, Markazi Publications, Jamia Nagar, Okhla, New Delhi 110025, 2021 |
| 27 | اصول طب<br>Usool-e-Tib | سید کمال الدین حسین ہمدانی<br>Syed Kamaluddin Husain Hamdani, NCPUL, New Delhi |

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Course curriculum from page no. 1 to 53 is approved.

20/6/2023

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**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

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प्राणाभिसरः प्राणायतनानाम्

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

SCAN ME

UNIUG-KUT

**NCISM**

**I professional BUMS**

Subject Code: **UNIUG-KUT**

# Kulliyat Umoore Tabiya

## KEY POINTS

| **Total number of Teaching hours: 210** | | | |
|---|---|---|---|
| **Lecture hours (LH) - Theory** | | **70 Hours** | **70 Hours (LH)** |
| Paper I | 70 Hours | | |
| | | | |
| **Non-Lecture hours (NLH) – Theory** | | **42 Hours** | **140 Hours (NLH)** |
| Paper I | 42 Hours | | |
| | | | |
| **Non-Lecture hours (NLH) - Practical** | | **98 Hours** | |

| **Examination (Papers & Mark Distribution)** | | | | | |
|---|---|---|---|---|---|
| **Item** | **Theory Component Marks** | **Practical Component Marks** | | | |
| | | **Practical** | **Viva** | **Elective** | **IA** |
| **Paper I** | **100** | **100** | **20** | **10** | **20** |
| | | | | | |
| **Sub-Total** | **100** | **150** | | | |
| **Total marks** | **250** | | | | |

# Preface

Kulliyat Umoore Ṭabiya is a fundamental subject which provides the basis for the study of Unani medicine as it deals with the governing principles of this medicine. These principles distinguish Unani medicine from other systems of medicine. This subject starts with the description of the existence of beings for which seven *Umoor* (factors) are considered essential viz. *Arkaan, Mizaj, Akhlat, Aaza, Arwah, Quwa* and *Afaal*. Further, it discusses bio- mineral diversity and structural-functional relationship. The students will also learn about the genesis and functions of human organs and their maintenance discussed under the concept of humours and Tabiat. One of the important topics included in this subject is the cause-and-effect relationship between various biological functions and environment. At last normal body functions are described as indicators of both health and disease.

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First BUMS

## Course Code and Name of Course

| | Course code | Name of Course |
|---|---|---|
| | UNIUG-KUT | Kulliyat Umoore Ṭabiya<br>(Basic Principles of Unani Medicine) |

## Table 1- Course outcomes and matched Program outcomes

| SR1 CO No | A1<br>Course Outcome (CO) UNIUG-KUT<br>At the end of the course UNIUG-KUT, the student should be able to- | B1<br>Course Outcome matched with program outcomes. |
|---|---|---|
| 1 | Elucidate طب (*Ṭibb)* as "the branch of knowledge in which the functions and properties of human body are studied in order to preserve the health and cure the disease with respect to اسباب وجود (*Asbāb-i-Wujūd*). | PO1 |
| 2 | Understand and describe the role of طبیعت (*Ṭabī'at)*, with its extended dimensions and capabilities. | PO1 |
| 3 | Discuss and demonstrate the concept of ارکان (*Arkān)* leading towards the formation of مواالید ثلاثہ (*Mawalīd-i-Thalātha*). | PO1, PO2, PO3 |
| 4 | Understand and evince the concept of مزاج(*Mizāj)*, and its clinical application. | PO1, PO2, PO3 |
| 5 | Comprehend and demonstrate the concept of اخلاط (*Akhlāṭ)* and its importance with respect to the diagnosis and treatment. | PO1, PO2, PO3 |
| 6 | Describe and demonstrate the course of the اعضاء (*A'ḍā')* with respect to their origin, formation, distinction and functions. | PO1, PO2, PO3 |
| 7 | Interpret the concept of ارواح (*Arwāḥ)* and their role in maintenance of health along with evidence based dynamism of حرارتِ غریزیہ (*Ḥarārat Gharīziyya*) [the chief common tool for all قوٰی(*Quwā*)]. | PO1 |
| 8 | Explain the concept of قوٰی (*Quwā)* and افعال (*Af'al*) with their classifications. | PO1 |

## Table 2: Contents of Kulliyat Umoore Tabiya - (Theory)

| | A2<br>List of Topics UNIUG-KUT | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| 1 | مبحثِ عام **(*Mabhas-i-'Āam*)** | I | 10 | 5 | 7 |
| | علمِ طب: موضوع، غرض وغایت اور اقسام (*'Ilm Ṭibb, Mawḍū, Gha'raḍ-o-ghāyat and its types* )<br>a) اسبابِ وجودِ انسانی مع اقسام (*Asbāb-i-Wujūd Insani* and its classification)<br>*b)* امورِ طبیعیہ: اہمیت اور اقسام (*Umūr Ṭabī'iyya*, impor*tance and classification)*<br>c) طبیعت: تفہیم، اہمیت، آلات اور مناعت سے اس کا تعلق (*Ṭabī'at:* understanding, importance, tools and its relation with immunity)<br>d) حرارتِ غریزیہ: تصور، تفہیم، افعال، رطوبت غریزیہ، حرارت غریبہ اور عفونت (*Ḥarārat Gharīziyya;* concept, understandings, functions, *Ruṭūbat Gharīziyya*, *Ḥarārat Gharība and Ufūnat*) | | | | |
| 2 | عناصر/ارکان **(*Arkān/ 'Anāṣir*)** | I | 10 | 5 | 4 |
| | ارکان/عناصر (*Arkān/ 'Anāṣir)*<br>a) ارکانِ اربعہ کا تصوّر (concept of *Arkān Arba'a)*<br>b) ارکان، عناصر اور اسطقسات کے مابین فرق (difference between *Arkān, 'Anāṣir* and *Uṣṭuqussāt*)<br>c) کیفیات اربعہ (*Kaifiyāt Arba'a*)<br>d) ارکان کی اقسام (Types of *Arkān*)<br>e) عناصر انسانیہ کی جدید توضیح (Theorem of structural peculiarity of modern science)<br>f) عناصر کی اطلاقی حیثیت (Clinical application of *'Anāṣir* in case of their excess and deficiency) | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3 | مزاج/کیفیت **(*Mizāj/ Kaifiyāt*)** | II | 20 | 15 | 8 |
| | a) مزاج: تعریف، توضیح، اہمیت اور اقسام (*Mizāj*: Definition, explanation, significance and types)<br>b) مزاج معتدل *(Mizāj Mu'tadil)*<br>c) مزاجِ معتدل طبّی (*MizājMu'tadil Ṭibbī*)<br>d) مزاج غیر معتدل (*Mizāj Ghayr Mu'tadil*)<br>e) امزجہ اعضاء (*Amjiza A'ḍā'*)<br>f) مزاج انسانی اور اجناس عشرہ (*Mizāj Insānī and Ajnās 'Ashara*)<br>g) امزجہ اسنان (*Amzija Asnān*)<br>h) مزاج اجناس (*Mizāj Ajnās)*<br>i) مزاج اقلیم (*Mizāj Iqlīm)*<br>j) تشخیص مرض اور مزاج (*Tashkhīṣ-i-Maraḍ and Mizāj*)<br>k) تجویز غذا، دواء بہ اعتبار مزاج (Recommendation of diets, drugs on the basis of *Mizāj*) | | | | |
| 4 | اخلاط ***(Akhlāṭ)*** | II | 15 | 15 | 6 |
| | a) اخلاط: تعریف، تصوّر و تفہیم و اقسام (*Akhlāṭ: definition, concept and understanding and types*)<br>b) رطوبتِ اولی و ثانیہ (*Ruṭūbat Uoola and Thāniya*)<br>c) خلط دم: تعریف و توضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Dam: definition, explanation, importance, types and application*)<br>d) خلط بلغم: تعریف و توضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Balgham: definition, explanation, importance, types and application*)<br>e) خلط صفراء: تعریف و توضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Ṣafra: definition, explanation, importance, types and application*)<br>f) خلط سوداء: تعریف و توضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ* | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Sawdā: definition, explanation, importance, types and application*)<br>g) اربعیت اخلاط کے دلائل (Justification of *Arb 'iat Akhlāṭ*) | | | | |
| 5 | اعضاء(***A 'ḍā'***) | II | 10 | 5 | 4 |
| | a) اعضاء کی توضیح اور اقسام (*A 'ḍā'*: Description and their classification)<br>b) اعضاء مفردہ کی تعریف، اقسام اور عدد اعضاء میں اطباء کی آراء (Definition of *A 'ḍā' Mufrada,* classification, opinion of different physicians)<br>c) اعضاء مرکبہ کی تعریف اور اقسام (Definition of *A 'ḍā' Murakkaba* with their classification)<br>d) اعضاء رئیسہ(*A 'ḍā' Ra 'īsa*)<br>e) اعضاء خادمہ (*A 'ḍā' Khādima*)<br>f) عضو معطی و عضو قابل(*'Uḍw Mu 'ṭī and 'Uḍw Qābil*) | | | | |
| 6 | ارواح(***Arwāḥ)*** | III | 10 | 5 | 3 |
| | a) ارواح کی تعریف اور اقسام (Definition of *Arwāḥ* and their classification)<br>b) اطباء کی نظر میں روح کا تصور(Concept of *Rūḥ* according to different Unani Scholars)<br>c) وظائف روح اور مسالک(Functions of *Arwāḥ* and their *Masālik*)<br>d) تنقیہ اور ترویح (*Tanqiya* and *Tarwīḥ*)<br>e) روح کا ارتکاز مختلف اعضاء میں(Concentration of *Rūḥ* in different organs) | | | | |
| 7 | قویٰ ***(Quwā)*** | III | 20 | 15 | 9 |
| | a) قویٰ کی تعریف اقسام اور وظائف (Definition of *Quwā* with their classification and functions) | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | b) قویٰ نفسانیہ: تعریف مع اقسام، وظائف وعوارضات (*Quwā Nafsāniyya*: definition, classification, functions and complications)<br>c) قویٰ حیوانیہ: تعریف مع اقسام، وظائف وعوارضات (*Quwā Ḥaywāniyya*: definition, classification, functions and complications)<br>d) قویٰ طبعیہ: تعریف مع اقسام ووظائف (*Quwā Ṭabī'iyya*: definition, classification and functions)<br>e) قویٰ تناسلیہ: تعریف اقسام وعوارضات (*Quwā Tanāsuliyya*: definition, classification, and complications)<br>f) افعال کی تقسیم بحیثیت قوی (Classification of the *Af'āl* (Functions) according to *Quwā* )<br>g) قویٰ میں باہمی اشتراک اور طبیعت کا کردار ( Association amongst *Quwā* and the role of *Ṭabī'at*) | | | | |
| 8 | افعال **(*Af'āl*)** | III | 5 | 5 | 1 |
| | a) افعال کی تعریف اور اقسام (Definition and classification of *Af'āl*)<br>b) فعل مفرد (*Fi'l Mufrad*)<br>c) فعل مرکب (*Fi'l Murakkab*)<br>d) اعراض افعال (*A'rāḍ Af'āl*) | | | | |
| **Total** | | | | **70** | **42** |

**Note: *Arkān*/ *'Anāṣir* (f)** the theory of *Arkān* has been proposed for origin of life and existence of the body. Concurrently element theory in modern chemistry failed to express both. So, these cannot be considered equivalently since their contexts of expression are different. This topic would help student in comprehension of cellular structure and its components equivalently to whole body. In the similar way student can comprehend the involvement of *Arkān* as Building blockers.

Table 2: Contents of Kulliyat Umoore Tabiya - (Practical)

| | A2<br>List of Topics UNIUG-KUT | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| 1 | ارکان (***Arkān***)<br>i. ارکان کا طبعی مقام (Natural position of *Arkān*)<br>ii. ارکان کی تقسیم دوری جدول کی مدد سے (Classification of elements with the help of Periodic Table)<br>عناصر انسانیہ کی مصوری پیش کش (Schematic representation of *'Anāṣir Insāniyya*) | I | 20 | | 12 |
| 2 | مزاج (***Mizāj***)<br>i. اجناس عشرہ پر مبنی سوالات سے مزاج انسانی کی تعیین (Evaluation of *Mizāj Insānī* by questionnaire based on *Ajnās 'Ashara*)<br>گلوب اور گراف کی مدد سے اقلیم کی توضیح (Demonstration of *Iqlīm* by globe and graph) | II | 20 | | 23 |
| 3 | اخلاط (***Akhlāṭ***)<br>i. اخلاط اربعہ کی توضیح (Demonstration of *Akhlāṭ Arba'a*)<br>غلبہ اخلاط کی تعیین (Evaluation of *Ghalaba-i- Akhlāṭ*) | II | 20 | | 25 |
| 4 | اعضاء (***A'ḍā***)<br>i. اعضاء مفردہ واعضاء مرکبہ کا تجزیہ (Assessment of *A'ḍā' Mufrada* wa *A'ḍā' Murakkaba*)<br>مختلف اعضاء کے افعال (Functions of different organs) | II | 8 | | 12 |
| 5 | ارواح (***Arwāḥ***)<br>i) ارواح کی تقسیم (Classification of *Arwāḥ*) | III | 8 | | 7 |
| 6 | قوی (***Quwā***)<br>i. قوی کی تقسیم (Classification of *Quwā*)<br>ii. قوت باصرہ کی تشریح (illustration of *Quwwat Bāṣira*)<br>iii. قوت سامعہ کی تشریح (Illustration of *Quwwat Sāmi'a*) | III | 20 | | 15 |

| | | | | | |
|---|---|---|---|---|---|
| | iv. کیفیات اربعہ کی تشریح (Illustration of *Kayfiyāt Arba'a*)<br>v. حواس خمسہ باطنہ (Illustration of *Ḥawās Khamsa Bāṭina*)<br>vi. حس مشترک کی تشریح (Illustration of *Ḥiss Mushtarak*)<br>vii. قوت واہمہ کی تشریح (Illustration of *Quwwat Wāhima*)<br>viii. قوت حافظ کی تشریح (Illustration of *Quwwat Ḥāfiẓa*) | | | | |
| 7 | افعال **(*Af'āl*)**<br>i. افعال کی تقسیم (Classification of *Af'āl*)<br>ii. وظائف اعضاء (Functions of different organs) | III | 4 | | 4 |
| **Total** | | | | | **98** |

## Table 3: Learning objectives of Kulliyat Umoore Tabiya UNIUG-KUT (Theory)

| 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 to know | E3 Level Does/shows/ Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- (*Mabḥas-i-'Ām* (General discussion)** (Lecture:- **5** hours, Non lecture **7** hours)<br>***a. 'IlmṬibb' Mawḍū, Gha'raḍ-o Ghāyat and its types*** | | | | | | | | | |
| CO1 | Define *'Ilm Ṭibb* | Cognitive/ comprehension | MK | Knows | Lecture | Written/ viva/open book test/project work | F&S | I | |
| CO1 | Describe the *Mawḍū* (Subject) | Cognitive/ comprehension | MK | Knows | Lecture | Written/viva/ open book test/project work | F&S | I | |
| CO1 | Discuss *Gha'raḍ-o Ghāyat* (Objective) of *Ṭibb* | Cognitive/ comprehension | MK | Knows | Lecture | Written/viva/ open book test/project work | F&S | I | |
| CO1 | Enlist *Aqsām Ṭibb Ma' Amthāl* (Classification of *Ṭibb* along with their examples) | Cognitive/ comprehension | MK | Knows | Lecture/ Tutorial | Written/viva/ open book test/project | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | work | | | |
| CO1 | Define *Ṭibb Naʾzri* and its importance | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ viva/ assignment | F&S | I | |
| CO1 | Define *Ṭibb ʻAmali* and its application | Cognitive/recall | MK | Knows how | Lecture | Written /viva | F&S | I | |
| | ***b. Asbāb-i- Wujūd Insāni* and its classification** | | | | | | | | |
| CO1 | Enlist types of *Asbāb-i- Wujūd Insāni* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva /open book test/project work | F&S | I | |
| CO1 | Discuss *Asbāb-i-Wujūd Insāni* | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ viva | F&S | I | |
| CO1 | Define *Asbāb Māddiyya* significance and its relevance in present perspective | Cognitive/ comprehension | MK | Knows | Lecture/tutorial | Written /viva/ open book test/project work | F&S | I | |
| CO1 | Define *Asbāb Fāʻila* significance and its relevance in present perspective | Cognitive/ comprehension | DK | Knows | Lecture/ seminar/ workshop | Written /viva/ open book test/project work | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1 | Define *Asbāb Ṣūriyya,* significance and its relevance in present perspective | Cognitive/ comprehension | DK | Knows | Lecture/ seminar/ workshop | Written/ open book test/project work | F&S | I | |
| CO1 | Define *Asbāb Tamāmiyya* | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | I | |
| | ***c. Umūr Ṭabī'iyya,* importance and classification** | | | | | | | | |
| CO1 | Define *Umūr Ṭabī'iyya* and their importance | Cognitive / comprehension | MK | Knows | Lecture/ Tutorial | Written /viva/assignment | F&S | I | |
| CO2 | Enlist the *Umūr Ṭabī'iyya* | Cognitive / comprehension | MK | Knows | Lecture | Written /viva | F&S | I | |
| | ***d. Ṭabī'at:* understanding, importance, tools, and immunity** | | | | | | | | |
| CO2 | Define *Ṭabī'at* and its importance | Cognitive / comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ viva/ open book test/project work | F&S | I | |
| CO2 | Distinguish the concepts/understanding of *Ṭabī'at* proposed by different Unani Scholars | Cognitive / comprehension | MK | Knows | Lecture/ Jigsaw activity | Written /viva/ open book test/project work | F&S | I | |
| CO2 | Enlist *Āla Ṭabī'at* (Tools of physis) | Cognitive and recall | MK | Knows | Lecture | Written/viva | F&S | I | |
| CO2 | Describe *Mana'at* (Immunity) and explain its relevance with understanding of *Ṭabī'at* | Cognitive/ comprehension | MK | Knows | Lecture | Written/ open book test/project | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | work | | | |
| | ***e. Ḥarārat Gharīziyya;* concept, understandings, functions, *Ruṭūbat Gharīziyya, Ḥarārat Gharība and Ufūnat*** | | | | | | | | |
| CO7 | Explain the concept of *Ḥarārat Gharīziyya* | Cognitive/ comprehension | MK | Knows | Lecture/ group discussion | Written/ open book test/project work | F&S | I | |
| CO7 | Explain the functions of *Ḥarārat Gharīziyya* in the body | Cognitive/ comprehension | DK | Knows | Lecture/ group discussion | Written/ Quiz/ Puzzle | F&S | I | |
| CO7 | Describe *Ruṭūbat Gharīziyya* | Cognitive/ comprehension | MK | Knows | Lecture | Written/Assignment | F&S | I | |
| CO7 | Describe the association between *Ruṭūbat Gharīziyya* and *Ḥarārat Gharīziyya* | Cognitive/ comprehension | DK | Knows | Lecture | Written/ open book test/project work | F&S | I | |
| CO7 | Define *Ḥarārat Gharība* and its effect on the body | Cognitive/ comprehension | DK | Knows | Lecture/ group discussion | Written | F&S | I | |
| CO7 | Explain the relationship between *Ḥarārat Gharība* and *'Ufūnat* | Cognitive comprehension | NK | Knows | Lecture/ group discussion | Written/Assignment | F | I | |
| **Topic 2- (*Arkān*/ *'Anāṣir*)** (Lecture:- **5** hours, Non lecture **4** hours)<br>**a) *Arkān*/ *'Anāṣir*** | | | | | | | | | |
| CO3 | Define *Arkān*/ *'Anāṣir* | Cognitive comprehensi | MK | Knows | Lecture | Written /viva | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | on | | | | | | | |
| | **b. (Concept of *Arkān Arba'a)*** | | | | | | | | |
| CO3 | Explain and demonstrate the concept of *Arkān Arba'a* in detail | Cognitive/ comprehension | MK | Knows | Lecture/ group discussion | Written/ open book test/project work | F&S | I | |
| | **c. *Arkān, 'Anāṣir* and *Usṭuqussāt*** | | | | | | | | |
| CO3 | Distinguish/ differentiate between the term of *Arkān*, *'Anāṣir* and *Usṭuqussāt* | Cognitive/Analysis | MK | Knows | Lecture | Written /viva/ Quiz/ Puzzle | F&S | I | |
| | ***d. Kayfiyāt Arba'a*** | | | | | | | | |
| CO3 | Define *Kayfiyāt* and describe *Kayfiyāt Arba'a* | Cognitive/Analysis | MK | MK | Lecture/ tutorial | Written /viva | F&S | I | |
| | **e. Types of *Arkān*** | | | | | | | | |
| CO3 | Enlist *Arkān* | Cognitive comprehension | MK | Knows | Lecture | Written /viva/assignment | F&S | I | |
| CO3 | Describe *Nār* (fire) as a constitutional element, its significance, and its natural position | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ open book test/project work | F&S | I | |
| CO3 | Describe *Hawā* (air) as a constitutional element, its significance, and its natural position | Cognitive comprehension | MK | Knows | Lecture/ seminar/ workshop | Written open book test/project | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | work / | | | |
| CO3 | Describe *Mā'* (water) as a constitutional element, its significance and its natural position | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written open book test/project work / | F&S | I | |
| CO3 | Describe *Arḍ* (earth) as a constitutional element, its significance, and its natural position | Cognitive /comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ open book test/project work | F&S | I | |
| | **f. Theorem of structural peculiarity of modern science** | | | | | | | | |
| CO3 | Describe the theorem of structural peculiarity of modern science to substantiate the building block of human body | Cognitive/ comprehension | MK | Knows | Lecture/ Jigsaw activity | Written/ open book test/project work | F&S | I | |
| | **g. Clinical orientation of *'Anāṣir* in case of their excess and deficiency** | | | | | | | | |
| CO3 | Enlist the clinical orientation of *'Anāṣir* in case of their excess and deficiency | Cognitive comprehension | DK | Knows | Lecture/self -directed learning | Written/assignment | F&S | I | |
| **Topic 3 - (*Mizāj/ Kayfiyāt*)** (Lecture:- **15** hours, Non lecture **8** hours)<br>**a. *Mizāj*: Definition, explanation, significance, and types** | | | | | | | | | |
| CO4 | Define *Mizāj/ Kayfiyāt* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |

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| CO4 | Explain the concept of *Mizāj* and its significance | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ open book test/project work | F&S | II | |
| CO4 | Enlist the types of *Mizāj* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva/ Quiz/ Puzzle | F&S | II | |
| | ***b. Mizāj Mu'tadil*** | | | | | | | | |
| CO4 | Describe *Mizāj Mu'tadil Ḥaqīqī* | Cognitive/comprehension | MK | Knows | Lecture | Written | F&S | II | |
| CO4 | Describe *Mizāj Ghayr Mu'tadil* | Cognitive/comprehension | MK | Knows | Lecture | Written | F&S | II | |
| CO4 | Define *'Adl fi'l Qisma* | Cognitive/comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| | ***c. Mizāj Mu'tadil Ṭibbī*** | | | | | | | | |
| CO4 | Define *Mizāj Mu'tadil Ṭibbī* | Cognitive/comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Enlist *Mizāj Mu'tadil Ṭibbī* | Cognitive/comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil Naw'ī bi'l Qiyās ila'l Khārij* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil Naw'ī bi'l Qiyās ila'l Dākhil* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil Ṣinfī bi'l Qiyās ila'l Khārij* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil Ṣinfī bi'l Qiyās ila'l Dākhil* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |

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| CO4 | Define *Mizāj Mu'tadil Shakhṣī bi'l Qiyās ila'l Khārij* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil Shakhṣī bi'l Qiyās ila'l Dākhil* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil 'Uḍwī bi'l Qiyās ila'l Khārij* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Define *Mizāj Mu'tadil 'Uḍwī bi'l Qiyās ila'l Dākhil* with example | Cognitive/comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| | ***d. Mizāj Ghayr Mu'tadil*** | | | | | | | | |
| CO4 | Enlist the types of *Mizāj Ghayr Mu'tadil* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| | ***e. Amjiza A'ḍā'*** | | | | | | | | |
| CO4, CO6 | Identify the *A'ḍā' Mu'tadila* along with their constitutional hierarchy and its justification | Cognitive/comprehension | DK | Knows | Lecture/ open book discussion | Written /viva/ open book test/project work | F&S | II | |
| CO4, CO6 | Identify the *A'ḍā' Ḥārra* along with constitutional hierarchy and its justification | Cognitive/comprehension | DK | Knows | Lecture | Written /viva/assignment | F&S | II | |
| CO4, CO6 | Identify the *A'ḍā' Bārida* along with constitutional hierarchy and its justification | Cognitive/comprehension | MK | Knows | Lecture | Written /viva/assignment | F&S | II | |
| CO4, CO6 | Identify the *A'ḍā' Yābisa* along with constitutional hierarchy and its justification | Cognitive/comprehension | MK | Knows | Lecture | Written/assignment | F&S | II | |

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| CO4, CO6 | Identify the *A'ḍā' Raṭba* along with constitutional hierarchy and its justification | Cognitive/comprehension | MK | Knows | Lecture | Written/assignment | F&S | II | |
| | ***f. Mizāj Insānī and Ajnās 'Ashara*** | | | | | | | | |
| CO4 | Appraise the *Mizāj Insānī* (human constitution) based on *Ajnās 'Ashara* | Cognitive/comprehension | MK | Knows | Lecture | Written/ open book test/project work | F&S | II | |
| | ***g. Amzija Asnān*** | | | | | | | | |
| CO4 | Classify the *Amzija Asnān* (constitution of different stages) | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Explain *Sinn-i- Numū* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Explain *Sinn-i-Shabāb* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Explain *Sinn-i- Kuhūlat* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO4 | Explain *Sinn-i-Shaykhūkhat* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |

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| | ***h. Mizāj Ajnās*** | | | | | | | | |
| CO4 | Explain the necessity and significance of *Mizāj Ajnās* | Cognitive/ comprehension | DK | Knows | Lecture/ Jigsaw activity | Written /viva/ open book test/project work | F&S | II | |
| | ***i. Mizāj Iqlīm*** | | | | | | | | |
| CO3 | Describe different doctrines in respect of *Mizāj Iqlīm* | Cognitive/ comprehension | DK | Knows | Lecture/ Jigsaw activity | Written /viva/ open book test/project work | F&S | II | |
| CO4 | Identify equable temperament of *Iqlīm* with argument | Cognitive/ comprehension | NK | Knows | Lecture | Written /viva/ open book test/project work | F | II | |
| | ***j. Tashkhīṣ Maraḍ and Mizāj*** | | | | | | | | |
| CO4 | Explain the importance of *Mizāj* in diagnosis of diseases | Cognitive/ comprehension | NK | Knows | Lecture/ Jigsaw activity | Written /viva/assignment | F | II | |
| | ***k.* Recommendation of diets, drugs *and Mizāj*** | | | | | | | | |
| CO4 | Describe the importance of *Mizāj* in *Tashkhīṣ* | Cognitive/ comprehension+ recall | NK | Knows | Lecture/ tutorial | Written /viva | F | II | |

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| CO4 | Explain the importance of *Mizāj* in prescribing medicines | Cognitive/ comprehension+ recall | NK | Knows | Lecture/ group discussion | Written /viva | F | II | |
| **Topic 4 - (*Akhlāṭ*)** (Lecture:- **15** hours, Non lecture **6** hours)<br>**a) *Akhlāṭ:* definition, concept and understanding and types** | | | | | | | | | |
| CO5 | Define *Akhlāṭ* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Explain different theories in respect of production of *Akhlāṭ* | Cognitive/ comprehension | DK | Knows | Lecture/ Jigsaw activity | Written/ open book test/project work/ Quiz/ Puzzle | F&S | II | |
| CO5 | Enlist the types of *Akhlāṭ* | Cognitive/ comprehension | MK | Knows | Lecture/ tutorial | Written /viva | F&S | II | |
| CO5 | Explain the *Tawlīd Akhlāṭ* in details | Cognitive/ comprehension/recall | DK | Knows | Lecture/ Group discussion | Written/ open book test/project work | F&S | II | |
| | **b. *Ruṭūbat Ūlā* and *Thāniya*** | | | | | | | | |
| CO5 | Describe *Ruṭūbat Ūlā* and their classification | Cognitive/ comprehension | DK | Knows | Lecture | Written/ viva | F&S | II | |

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| CO5 | Describe *Ruṭūbat Thāniya* and their classification | Cognitive/ comprehension | NK | Knows | Lecture/self-directed learning | Written | F | II | |
| | **c. *Khilṭ Dam:* definition, explanation, importance, types, and application** | | | | | | | | |
| CO5 | Describe *Dam* and its constitutional hierarchy along with arguments | Cognitive/ comprehension | MK | Knows | Lecture/ seminar/ workshop | Written/ open book test/project work | F&S | II | |
| CO5 | Enlist types of *Dam* | Cognitive/ comprehension | DK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Discuss *Ṭabīʿī Dam* and its characteristics | Cognitive/ comprehension | DK | Knows | Lecture | Written | F&S | II | |
| CO5 | Discuss *Ghayr Ṭabīʿī Dam* and its classification | Cognitive/ comprehension | NK | Knows | Lecture/ tutorial | Written | F | II | |
| CO5 | Discuss and enlist *Amrāḍ Damwiyya* | Cognitive/ comprehension | NK | Knows | Lecture | Written | F | II | |
| | **d. *Khilṭ Balgham:* definition, explanation, importance, types and application** | | | | | | | | |
| CO5 | Define *Balgham* and its constitutional hierarchy along with arguments and its benefits | Cognitive/ comprehension | MK | Knows | Lecture | Written/ open book test/project work | F&S | II | |

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| CO5 | Enlist the types of *Balgham* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Define *Ṭabīʿī Balgham*, its characteristics and necessities | Cognitive/ comprehension | DK | Knows | Lecture/ seminar/ workshop | Written | F&S | II | |
| CO5 | Define *Balgham Ghayr Ṭabīʿī* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Enlist the types of *Balgham Ghayr Ṭabīʿī* based on taste | Cognitive/ comprehension | NK | Knows | Lecture/ tutorial | Written/ viva | F | II | |
| CO5 | Enlist the types of *Balgham Ghayr Ṭabīʿī* based on consistency | Cognitive/ comprehension | NK | Knows | Lecture | Written/ viva | F | II | |
| CO5 | Enlist the types of *Balgham Ghayr Ṭabīʿī* based on *Rāyeḥa* (odor) | Cognitive/ comprehension | NK | Knows | Lecture | Written /viva | F | II | |
| CO5 | Classify *Amrāḍ Balghamiyya* | Cognitive/ comprehension | NK | Knows | Lecture/ tutorial | Written/assignment | F | II | |
| | **e. *Khilṭ Ṣafra:* definition, explanation, importance, types, and application** | | | | | | | | |
| CO5 | Define *Ṣafrā*', its constitutional hierarchy along with arguments and its benefits | Cognitive/ comprehension | MK | Knows | Lecture/ problem based | Written/ open book test/project | F&S | II | |

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| CO5 | Enlist the types of *Ṣafrā*' | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Define *Ṣafrā*' *Ṭabīʿī*, its characteristics and significance | Cognitive/ comprehension | DK | Knows | Lecture/ group discussion | Written/ viva/ open book test/project work | F&S | II | |
| CO5 | Describe *Ṣafrā' Ghayr Ṭabīʿī* along with its classification | Cognitive/ comprehension | DK | Knows | Lecture | Written | F&S | II | |
| CO5 | Enlist the *Amrāḍ Ṣafrāwiyya* | Cognitive/ comprehension | NK | Knows | Lecture | Written /viva | F | II | |
| | **f. *Khilṭ Sawdā:* definition, explanation, importance, types, and application** | | | | | | | | |
| CO5 | Define *Sawdā*', its constitutional hierarchy with their arguments and benefits | Cognitive/ comprehension | MK | Knows | Lecture/ Jigsaw activity | Written/ open book test/project work | F&S | II | |
| CO5 | Enlist the types of *Sawdā'* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | |
| CO5 | Define *Sawdā' Ṭabīʿī*, its characteristics and significance | Cognitive/ comprehension | DK | Knows | Lecture/ seminar/ workshop | Written | F&S | II | |

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| CO5 | Describe *Sawdā' Ghayr Ṭabīʿī* along with its classification | Cognitive/ comprehension | DK | Knows | Lecture | Written | F&S | II | |
| CO5 | Enlist the *Amrāḍ Sawdāwiyya* | Cognitive/ comprehension | DK | Knows | Lecture | Written | F&S | II | |
| | **g. Justification of *Arbʿiat Akhlāṭ*** | | | | | | | | |
| CO5 | Justify the *Arbʿiat Akhlāṭ* based on arguments | Cognitive/ comprehension | MK | Knows | Lecture/self-directed learning | Written/ open book test/project work | F&S | II | |
| **Topic 5- (*A'ḍā'*)** (Lecture:- **5** hours, Non lecture **4** hours) | | | | | | | | | |
| | **a. *A'ḍā'*: Description and their classification** | | | | | | | | |
| CO6 | Describe *A'ḍā'* (Organs) | Cognitive/ comprehension | MK | Knows how | Lecture/ audio-visual demonstration | Written /viva | F&S | II | Tashrīḥ |
| CO6 | Classify *A'ḍā'* (Organs) | Cognitive/ comprehension | MK | Knows how | Lecture/ audio-visual demonstration | Written /viva/ Quiz/ Puzzle | F&S | II | Tashrīḥ |
| | **b. Definition of *A'ḍā' Mufrada*, classification, opinions of different physicians** | | | | | | | | |
| CO6 | Define *A'ḍā' Mufrada* (Simple Organs) | Cognitive/comprehension | MK | Knows | Lecture/ group discussion | Written/viva | F&S | II | |

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| CO6 | Classify the *A'ḍā' Mufrada* | Cognitive/ comprehension | MK | Knows | Lecture | Written /viva | F&S | II | Tashrīḥ |
| CO6 | Enlist the *A'ḍā' Mufrada* and their structure and functions | Cognitive/ comprehension | MK | Knows how | Lecture | Written /viva | F&S | II | Tashrīḥ |
| CO6 | Explain the genesis of *A'ḍā' Mufrada* and controversy amongst different group of physicians | Cognitive/ comprehension | DK | Knows how | Lecture/ group discussion | Written/viva/ open book test/project work | F&S | II | Tashrīḥ |
| CO6 | Justify the reason for inclusion of *Sha'r* (Hair), *Ẓufr* (Nail) and *Mukhkh* (Marrow) in *A'ḍā' Mufrada* | Cognitive/comprehension | DK | Knows how | Lecture/ group discussion | Written/ viva/ open book test/project work | F&S | II | Tashrīḥ |
| | **c. Definition of *A'ḍā' Murakkaba* with their classification** | | | | | | | | |
| CO6 | Define *A'ḍā' Murakkaba* (Compound Organs) with their classification | Cognitive/demonstration | MK | Knows | Lecture/ Jigsaw activity | Written/viva | F&S | II | Tashrīḥ |
| | **d. *A'ḍā' Ra'īsa*** | | | | | | | | |
| CO6 | Define *A'ḍā' Ra'īsa* (Vital Organs) and their classification | Cognitive/recall | MK | Knows | Lecture/ group discussion | Written /viva | F&S | II | Tashrīḥ |
| | **e. *A'ḍā' Khādima*** | | | | | | | | |
| CO6 | Define *A'ḍā' Khādima* (Subordinate Organs) | Cognitive/demonstration | MK | Knows | Lecture | Written/ viva | F&S | II | Tashrīḥ |

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| | **f. *'Uḍw Mu'ṭī and 'Uḍw Qābil*** | | | | | | | | |
| CO6 | Explain the concept of *'Uḍw Mu'ṭī* (Donor Organ) | Cognitive/comprehension | DK | Knows | Lecture | Written/ open book test/project work | F&S | II | Tashrīḥ |
| CO6 | Explain the concept of *'Uḍw Qābil* (Recipient Organ) | Cognitive/comprehension | MK | Knows | Lecture | Written/assignment | F&S | II | Tashrīḥ |
| **Topic 6- (*Arwāḥ*)** (Lecture:- **5** hours, Non lecture **3** hours) | | | | | | | | | |
| | **a) Definition of *Arwāḥ* and their classification** | | | | | | | | |
| CO7 | Define *Arwāḥ* and their classification | Cognitive/comprehension | MK | Knows how | Lecture | Written /viva | F&S | III | |
| | **b) Concept of *Rūḥ* according to different Unani Scholars** | | | | | | | | |
| CO7 | Describe the Concept of *Arwāḥ* (Pneuma) according to different Unani Scholars | Cognitive/comprehension | DK | Knows how | Lecture/ Group discussion | Written /viva/ open book test/project work | F&S | III | |
| | **c) Functions of *Arwāḥ* and their *Masālik*** | | | | | | | | |
| CO7 | Classify the functions of *Arwāḥ* and their *Masālik* (channels) | Cognitive/demonstration | MK | Knows how | Lecture/audio-visual demonstration | Written/ Quiz/ Puzzle | F&S | III | |
| | **d) *Tanqiya* and *Tarwīḥ*** | | | | | | | | |

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| CO7 | Discuss in brief *Tanqiya* and *Tarwīḥ* | Cognitive/comprehension | MK | Knows | Lecture/ group discussion | Written /viva | F&S | III | |
| | **e) Concentration of *Rūḥ* in different organs** | | | | | | | | |
| CO7 | Analyze the concentration of *Rūḥ* in different organs | Cognitive/Analyze | DK | Knows how | Lecture | written | F&S | III | |
| **Topic 7 - (*Quwā*)** (Lecture:- **15** hours, Non lecture **9** hours) | | | | | | | | | |
| | **a) Definition of *Quwā* with their classification** | | | | | | | | |
| CO8 | Define *Quwā* (Powers or Faculties) with their classification | Cognitive/comprehension | MK | Knows | Lecture | Written /viva/ open book test/project work | F&S | III | |
| | **b) *Quwā Nafsāniyya*: definition, classification, functions, and complications** | | | | | | | | |
| CO8 | Describe *Quwā Nafsāniyya* (Psychic or Mental Faculty) in brief | Cognitive/comprehension | MK | Knows | Lecture | Written open book test/project work / | F&S | III | Tashrīḥ |
| CO8 | Discuss *Quwwat Muḥarrika* (Motor Faculty) | Cognitive/recall | DK | Knows | Lecture/ group discussion | Written/ viva/ open book test/project work | F&S | III | Tashrīḥ |
| CO8 | Discuss *A'rāḍ Quwwat Muḥarrika* (Motor Faculty) | Cognitive/ comprehensi | DK | Knows how | Lecture/ group | Written /viva | F&S | III | Tashrīḥ |

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| | | on/recall | | | discussion | | | | |
| CO8 | Discuss *Quwwat Mudrika* (Faculty of Perception) | Cognitive/recall | MK | Knows | Lecture/ tutorial | Written/ Viva/ open book test/project work | F&S | III | Tashrīḥ |
| CO8 | Discuss *Ḥawās Khamsa Ẓāhira* (Five Special Senses) | Cognitive/demonstration | MK | Knows | Lecture/audio-visual demonstration/ integrated teaching | Written /viva/ open book test/project work | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Bāṣira* (Power of Vision) | Cognitive/demonstration | MK | Knows | Lecture / audiovisual demonstration/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Sāmi'a* (Power of Hearing) | Cognitive/ demonstration | MK | Knows | Lecture / audiovisual demonstration/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Enlist *A'rāḍ Quwwat Sāmi'a* (Power of Hearing) | Cognitive/ recall | NK | Knows how | Lecture/ tutorial | Written /viva | F | III | Tashrīḥ |
| CO8 | Describe *Quwwat Shāmma* (Power of Smell) | Cognitive/demonstration | MK | Knows | Lecture /audiovisual demonstration/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |

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| CO8 | Enlist *A'rāḍ Quwwat Shāmma* | Cognitive/recall | NK | Knows how | Lecture/ Problem based learning/ integrated teaching | Written /viva | F | III | Tashrīḥ |
| CO8 | Describe *Quwwat Dhā'iqa* (Power of Taste) | Cognitive/demonstration | MK | Knows | Lecture /audiovisual demonstration/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Enlist *A'rāḍ Quwwat Dhā'iqa* | Cognitive/recall | NK | Knows how | Lecture/ problem-based learning/ integrated teaching | Written /viva | F | III | Tashrīḥ |
| CO8 | Describe *Quwwat Lāmisa* (Power of Tactile Sensation) | Cognitive/demonstration | MK | Knows | Lecture / audiovisual demonstration/ integrated teaching | Written/ viva | F&S | III | Tashrīḥ |
| CO8 | Enlist *A'rāḍ Quwwat Lāmisa* | Cognitive/recall | NK | Knows how | Lecture/ integrated teaching | Written /viva | F | III | Tashrīḥ |
| CO8 | Describe *Ḥawās Khamsa Bāṭina* (Intellectual Senses) | Cognitive/demonstration | MK | Knows how | Lecture/ Problem based/ integrated teaching learning | Written /viva/ open book test/project work | F&S | III | Tashrīḥ |

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| CO8 | Enlist *A'rāḍ Ḥawās Khamsa Bāṭna* | Cognitive/recall | NK | Knows how | Lecture/ Problem based learning/ integrated teaching | Written /viva | F | III | Tashrīḥ |
| CO8 | Describe *Ḥiss Mushtarak* (Power of Composite Senses) | Cognitive/demonstration | MK | Knows how | Lecture/ problem based integrated teaching learning/ | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Mutakhayyila* (power of reasoning and imagination) | Cognitive/comprehension | MK | Knows how | Lecture/ problem based integrated teaching learning/ | written | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Ḥafiẓa* (Power of Memory) | Cognitive/recall | MK | Knows how | Lecture/ group discussion/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Mutaṣarrifa* (Power of modification) | Cognitive/recall | MK | Knows how | Lecture/ group discussion/ integrated teaching | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Wāhima* (Power of apprehension) | Cognitive/recall | MK | Knows how | Lecture/ Problem based learning/ integrated | written | F&S | III | Tashrīḥ |

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| | | | | | teaching | | | | |
| | **c) *Quwā Ḥaywāniyya*: definition, classification, functions, and complications** | | | | | | | | |
| CO8 | Describe *Quwwat Ḥaywāniyya* (Vital Faculties) | Cognitive/demonstration | MK | Knows how | Lecture | written | F&S | III | Tashrīḥ |
| CO8 | Describe *Quwwat Fā'ila* and *Munfa'ila Ḥaywāniyya* | Cognitive/demonstration | DK | Knows | Lecture/ Problem based learning | Written/ open book test/project work | F&S | III | Tashrīḥ |
| CO8 | Discuss the advantages of *Inqibāḍ Qalb* and *Inbisāṭ Qalb* (Systolic and Diastolic movements of the Heart) | Cognitive/demonstration | DK | Knows how | Lecture / group discussion/ integrated teaching | Written /viva/ open book test/project work | F&S | III | Tashrīḥ |
| CO8 | Enlist *A'rāḍ Quwwat Ḥaywāniyya* | Cognitive/recall | NK | Knows how | Lecture / Problem based learning | written | F | III | Tashrīḥ |
| | **d) *Quwā Ṭabī'iyya*: definition, classification, and functions** | | | | | | | | |
| CO8 | Define and Classify *Quwwat Ṭabī'iyya* (Physical Power) | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written/viva | F&S | III | |
| CO8 | Define and explain the functions of *Quwwat Ghādhiya* | Cognitive/comprehension | MK | Knows | Lecture | written | F&S | III | |
| CO8 | Define and explain the functions of *Quwwat Nāmiya* (Power of Growth) | Cognitive/comprehension | MK | Knows | Lecture | written | F&S | III | |
| CO8 | Describe *Sharā'iṭ-i-Taghdhiya* (Conditions of nutrition) in detail | Cognitive/comprehension | MK | Knows | Lecture/ seminar | Written /viva/ open | F&S | III | |

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| | | | | | /workshop | book test/project work | | | |
| CO8 | Explain the Functional stages of *Quwwat Ghādhiya* at organ level | Cognitive/comprehension | MK | Knows | Lecture/ group discussion | Written /viva | F&S | III | |
| CO8 | Explain the functions of *Quwwat Mughayyira* (Power of transformation) | Cognitive/comprehension | MK | Knows | Lecture | Written /viva | F&S | III | |
| CO8 | Define and explain the functions of *Quwwat Muwallida* (Generative Power) | Cognitive/comprehension | MK | Knows how | Lecture | Written /viva | F&S | III | |
| CO8 | Define and explain the functions of *Quwwat Muṣawwira* (Molding Power) | Cognitive/comprehension | MK | Knows how | Lecture/ problem-based learning | Written/ viva | F&S | III | |
| CO8 | Describe *Taghayyurāt Ghidhā'* (Metabolism of Nutrients) in detail | Cognitive/comprehension | DK | Knows | Lecture/audio-visual demonstration | Written /viva/ open book test/project work | F&S | III | |
| CO8 | Explain the functions of *Quwwat Jādhiba*, *Māsika*, *Hāḍima* and *Dāfi'a* (Powers of absorption, retention, digestion, and excretion) | Cognitive/comprehension | MK | Knows | Lecture/ group discussion | Written /viva | F&S | III | |
| CO8 | Enlist *Huḍūm Arba'a* (Four Digestions) | Cognitive/comprehension | MK | Knows | Lecture/ open book discussion | Written /viva | F&S | III | |
| CO8 | Describe *Haḍm Mi'dī* (The Elementary Digestion) in detail | Cognitive/demonstration | DK | Knows | Lecture /audiovisual demonstration | Written /viva | F&S | III | Tashrīḥ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO8 | Describe *Haḍm Kabidī* (The Hepatic Digestion) in detail | Cognitive/demonstration | DK | Knows | Lecture / audiovisual demonstration | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Haḍm ʻUrūqī* (Vascular Digestion) in detail | Cognitive/demonstration | DK | Knows | Lecture | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Describe *Haḍm ʻUḍwī* (Cellular Digestion) in detail | Cognitive/demonstration | DK | Knows | Lecture /audiovisual demonstration | written | F&S | III | Tashrīḥ |
| | **e) *Quwā Tanāsuliyya*: definition, classification, and complications** | | | | | | | | |
| CO8 | Define and classify the *Quwwat Tanāsuliyya* (Power of reproduction) | Cognitive/demonstration | MK | Knows how | Lecture | Written /viva | F&S | III | Tashrīḥ |
| CO8 | Enlist *Aʻrāḍ Quwwat Tanāsuliyya* (Power of reproduction) | cognitive | NK | Knows how | Lecture/ problem-based learning | Written /viva | F | III | Tashrīḥ |
| | **f) Classification of the *Afʻāl* (Functions) according to *Quwā* (Powers)** | | | | | | | | |
| CO8 | Classify the *Afʻāl* (Functions) according to *Quwā* (Powers) | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written /viva/ open book test/project work | F&S | III | |
| CO8 | Explain relationship between *Afʻāl* and *Quwā* | Cognitive/comprehension | DK | Knows how | Lecture | Written /viva | F&S | III | |
| | **g) Association amongst *Quwā* and the role of *Ṭabīʻat*** | | | | | | | | |
| CO8, CO2 | Explain the association amongst *Quwā* and the role of *Ṭabīʻat* | Cognitive/comprehension | NK | Knows how | Lecture/ audio-visual | Written /viva/ open | F | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | demonstration/tutorial | book test/project work | | | |
| **Topic 8 - (*Af'āl*)** (Lecture:- **5** hours, Non lecture **1** hour) | | | | | | | | | |
| | **a) *Definition and classification of Af'āl*** | | | | | | | | |
| CO8 | Define and classify *Af'āl* | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written /viva | F&S | III | |
| | **b) *Fi'l Mufrad*** | | | | | | | | |
| CO8 | Define and classify *Fi'l Mufrad* | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written /viva | F&S | III | |
| | **c) *Fi'l Murakkab*** | | | | | | | | |
| CO8 | Define and classify *Fi'l Murakkab* | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written /viva | F&S | III | |
| | **d) *A'rāz Af'āl*** | | | | | | | | |
| CO8 | Describe *A'rāḍ Af'āl* | Cognitive/comprehension | MK | Knows | Lecture/ Problem based learning | Written /viva | F&S | III | |

**Table 4: Learning objectives of *Kulliyat Umoore Tabiya* UNIUG-KUT** (Practical)

| A4 Course outcome | B4 Learning Objective (At the end of the practical/ clinical session, the students should be able to) | C4 Domain/Sub | D4 Must know/ desirable to know/ Nice to know | E4 Level Does/shows/Knows how/knows | F4 T-L method | G4 Assessment | H4 Formative /summative | I4 Term | J4 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Practical 1- (*Arkān*)** (Non lecture:- **12** hours) | | | | | | | | | |
| CO3 | illustrate the natural position of *Arkān* | Cognitive/ comprehension | MK | Knows + Knows how | schematic diagram | Written/viva | F & S | I | |
| | Identify and classify the Elements with the help of Periodic Table | Cognitive/ comprehension Psychomotor | MK | Knows + Knows how | schematic diagram | Written/viva | F & S | I | |
| | Illustrate *'Anāṣir Insāniyya* | Cognitive/ comprehension | MK | Knows + Knows how | schematic diagram | Written/viva | F & S | I | |
| **Practical 2- (*Mizāj*)** (Non lecture:- **23** hours) | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO4 | Evaluate *Mizāj Shakhsī* through *Ajnās ʻAshara* | Cognitive/ Comprehension | MK | Knows + Knows how | schematic diagram/inquiry -based learning | Written/viva | F& S | II | |
| | Demonstrate *Aqālīm* with map/globe | Cognitive/ Comprehension | MK | Knows + Knows how +shows | schematic diagram/ audio visual demonstration | Written/viva | F& S | II | |
| | Discuss and demonstrate old and new demarcation of *Aqālīm* | Cognitive/ Comprehension | MK | Knows + Knows how | schematic diagram/audio visual demonstration | Written/viva | F& S | II | |
| **Practical 3- (*Akhlāṭ*)** (Non lecture:- **25** hours) | | | | | | | | | |
| CO5 | Demonstrate *Akhlāṭ Arbaʻa* by blood sample | Cognitive/ comprehension /Psychomotor | MK | Knows + Knows how +shows | Demonstration/ observation/ | Written/viva | F& S | II | |
| | Evaluate *Ghalaba-i-Akhlāṭ* by their *ʻAlāmāt* | Cognitive/ Comprehension | MK | Knows + Knows how | schematic diagram/ Demonstration of Akhlat of venous blood sample | Written/viva | F& S | | |
| **Practical 4- (*Aʻḍā'*)** (Non lecture:- **12** hours) | | | | | | | | | |
| CO6 | Examination of *Aʻḍā'Mufrada* with the help of slide showing | Cognitive/ Comprehension/Psychomotor | MK | Knows + Knows how +shows | schematic diagram | Written/viva | F& S | II | Tashrīḥ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | microstructural peculiarities and *A'ḍā'Murakkaba* by diagram and models/specimens | | | | | | | | |
| | Illustrate the functions of different organs | Cognitive/ Comprehension | MK | Knows + Knows how | schematic diagram | Written/viva | F& S | II | |
| **Practical 5- (*Arwāḥ*)** (Non lecture:- **7** hours) | | | | | | | | | |
| CO7 | Explain the classification of *Arwāḥ* by innovative mode | Cognitive/ Comprehension | MK | Knows + Knows how | schematic diagram | Written/viva | F& S | III | |
| **Practical 6 - (*Quwā*)** (Non lecture:- **15** hours) | | | | | | | | | |
| CO8 | Explain the classification of *Quwā* | Cognitive/ comprehension | MK | Knows + Knows how | schematic diagram | Written/viva | F& S | III | |
| CO8 | Illustrate *Quwwat Bāṣira* through assessment of visual Acuity by Snellen Chart | Cognitive/Recall+ Comprehension | MK | Knows+ Knows how | Tutorial+ Demonstration | Written Practical exam +Viva-Voce | F & S | III | Tashrīḥ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO8 | Illustrate *Quwwat Sāmi'a* through Tuning Fork Test/ Audiometry | Cognitive/Recall+ Comprehension Psychomotor | MK | Shows/ Knows /Knows how | Tutorial+ Demonstration | Written/ Practical exam +Viva-Voce | F & S | III | Tashrīḥ |
| CO8 | Demonstrate *Quwwat Lāmisa* through perception of *Kayfiyāt Arba'a* by calorimeter with tactile sensation | Cognitive/ comprehension Psychomotor | MK | shows | Demonstration/ observation | Written/viva | F & S | III | Tashrīḥ |
| CO8 | Describe and demonstrate *Ḥawās Khamsa Bāṭina* | Cognitive/Recall+ Comprehension | MK | Shows/ Knows/ Knows how | schematic diagram/Demonstration | Written /Practical exam +Viva-Voce | F & S | III | Tashrīḥ |
| CO8 | Describe and demonstrate the *Ḥiss Mushtarak* by Newton's Colour Disc | Cognitive/Recall+ Comprehension | MK | Shows /Knows+ Knows how | Audio visual | Written/ Practical exam +Viva-Voce | F & S | III | Tashrīḥ |
| CO8 | Describe and demonstrate the *Quwwat Wāhima* | Cognitive/Recall+ Comprehension | MK | Shows/Knows/ Knows how | Audio visual | written /Practical exam +Viva-Voce | F & S | III | Tashrīḥ |
| CO8 | Describe and demonstrate the *Quwwat Ḥafiẓa* through PGI Memory Scale | Cognitive/Recall+ Comprehension | MK | Shows/Knows/ Knows how | Tutorial+ Demonstration | Written/Practical exam +Viva-Voce | F & S | III | Tashrīḥ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Practical 7 - (*Af'al*)** (Non lecture:- **4** hours) | | | | | | | | | |
| CO8 | Illustrate the classification of *Af'al* | Cognitive/ comprehension | MK | Knows + Knows how +shows | schematic diagram/demonstration | Written/viva | F& S | III | |
| CO8 | Illustrate the functions of different organs | Cognitive/ Comprehension Psychomotor | MK | Knows + Knows how | Tutorial+ Demonstration | Written/viva | F& S | III | |

## Table 5- Non Lecture Activities of *Kulliyat Umoore Tabiya* UNIUG-KUT

| Sr. No. | List non lecture Teaching-Learning methods | No of Activities |
|---|---|---|
| 1. | Group discussion | 21 |
| 2. | Seminar/Workshop | 27 |
| 3. | Tutorial | 16 |
| 4. | Problem based learning | 12 |
| 5. | Self-directed learning | 03 |
| 6. | Audio visual demonstration | 02 |
| 7. | Integrated teaching | 17 |
| 8. | Jigsaw activity | 08 |
| 9. | Open book discussion/ Open book Test | 15 |
| 10 | Quiz/ Puzzle | 06 |
| 11 | schematic diagram | 13 |
| | | |

## Table 6: Assessment Summary

### 6 A - Number of papers and Marks Distribution

| S. No. | Subject | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Practical or Clinical | Viva | Electives | IA | Total | |
| 1. | *Kulliyat Umoore Tabiya* (Basic Principles of Unani Medicine) | 1 | 100 | 100 | 20 | 10 | 20 | 150 | 250 |

### 6. B - Scheme of Assessment (formative and Summative)

| SR.NO. | PROFESSIONAL COURSE | DURATION OF PROFESSIONAL COURSE | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First | 3 PA & First TT | 3 PA & Second TT | 3 PA & UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

## 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 | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 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. | Other activities explained in Table 3 Column G3 as per indicated term. |

## 6 E - Question Paper Pattern

**I PROFESSIONAL BUMS EXAMINATIONS**

**UNIUG-KUT**

**PAPER**

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

| | **A**<br>**List of Topics** | **B**<br>**Term** | **C**<br>**Marks** | **D**<br>**Type of Questions**<br>**"Yes" can be asked.**<br>**"No" should not be asked.** | | |
|---|---|---|---|---|---|---|
| | | | | **MCQ (1 Mark)** | **SAQ (5 Marks)** | **LAQ (10 Marks)** |
| 1 | مبحثِ عام (***Mabḥas-i-'Ām*)** | I | 10 | yes | yes | No |
| | a) علمِ طب: موضوع، غرض وغایت اور اقسام (*'IlmṬibb,Mawḍū,Gharḍ-o-Ghāyat and its types* )<br>b) اسبابِ وجودِ انسانی مع اقسام (*Asbāb-i-Wujūd Insāni* and its classification)<br>c) امورِ طبیعیہ: اہمیت اور اقسام (*Umūr Ṭabī'iyya,* imp*ortance and classification*)<br>d) طبیعت: تفہیم، اہمیت، آلات اور مناعت سے اس کا تعلق (*Ṭabī'at:* understanding, importance, tools and its | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | relation with immunity)<br>e) حرارتِ غریزیہ: تصور، تفہیم، افعال، رطوبت غریزیہ، حرارت غریبہ اور عفونت (*Ḥarārat Gharīziyya*: Concept, Understandings, Functions, *Ruṭūbat Gharīziyya*, *Ḥarārat Gharība and Ufūnat*) | | | | | |
| 2 | عناصر/ارکان (***Arkān/ ‘Anāṣir***) | I | 10 | yes | yes | Yes |
| | a) ارکان/عناصر (*Arkān/ ‘Anāṣir*)<br>b) ارکانِ اربعہ کا تصور (concept of *Arkān Arba‘a*)<br>c) ارکان، عناصر اور اسطقسات کے مابین فرق (difference between *Arkān, ‘Anāṣir* and *Usṭuqussāt*)<br>d) کیفیات اربعہ (Kaifiyāt *Arba‘a*)<br>e) ارکان کی اقسام (Types of *Arkān*)<br>f) عناصر انسانیہ کی جدید توضیح (Theorem of structural peculiarity of modern science)<br>g) عناصر کی اطلاقی حیثیت (Clinical orientation of *‘Anāṣir* in case of their excess and deficiency) | | | | | |
| 3 | مزاج/کیفیت (*Mizāj*/ Kaifiyāt) | II | 20 | Yes | Yes | Yes |
| | a) مزاج: تعریف، توضیح اہمیت اور اقسام (*Mizāj*: Definition, explanation, significance and types)<br>b) مزاج معتدل (*Mizāj Mu‘tadil*)<br>c) مزاجِ معتدل طبّی (*MizājMu‘tadil Ṭibbī*)<br>d) مزاج غیر معتدل (*Mizāj Ghayr Mu‘tadil*) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | e) امزجہ اعضاء (*Amzija A'ḍā'*)<br>f) مزاج انسانی اور اجناس عشرہ (*Mizāj Insānī and Ajnās 'Ashara*)<br>g) امزجہ اسنان (*Amzija Asnān*)<br>h) مزاج اجناس (*Mizāj Ajnās*)<br>i) مزاج اقلیم (*Mizāj Iqlīm*)<br>j) تشخیص مرض اور مزاج (*Tashkhīṣ-i-Maraḍ and Mizāj*)<br>k) تجویز غذا ، دوااور مزاج (Recommendation of diets, drugs *and Mizāj*) | | | | | |
| 4 | اخلاط (*Akhlāṭ*) | II | 15 | Yes | yes | Yes |
| | a) اخلاط: تعریف، تصوّر و تفہیم واقسام (*Akhlāṭ: definition, concept and understanding and types*)<br>b) رطوبتِ اولی وثانیہ (*Ruṭūbat Uūla and Thāniya*)<br>c) دم: تعریف وتوضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Dam:* definition, explanation, importance, types and application)<br>d) خلط بلغم: تعریف وتوضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Balgham:* definition, explanation, importance, types and application)<br>e) خلط صفراء: تعریف وتوضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Ṣafrā':* definition, explanation, importance, types and application)<br>f) خلط سوداء: تعریف وتوضیح مع دلائل، اہمیت، اقسام اور اطلاقی حیثیت (*Khilṭ Sawdā':* definition, explanation, importance, types and | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | application)<br>g) اربعیت اخلاط کے دلائل (Justification of *Arbʿiat Akhlāṭ*) | | | | | |
| 5 | اعضاء(*A'ḍā'*) | II | 10 | yes | Yes | No |
| | a) اعضاء کی توضیح اور اقسام (*A'ḍā'*: Description and their classification)<br>b) اعضاء مفردہ کی تعریف، اقسام اور عدد اعضاء میں اطباء کی آراء (Definition of *A'ḍā' Mufrada*, classification, opinions of different physicians)<br>c) اعضاء مرکبہ کی تعریف اور اقسام (Definition of *A'ḍā' Murakkaba* with their classification)<br>d) اعضاء رئیسہ(*A'ḍā' Ra'īsa*)<br>e) اعضاء خادمہ (*A'ḍā' Khādima*)<br>f) عضو معطی و عضو قابل(*'Uḍw Muʿṭī and 'Uḍw Qābil*) | | | | | |
| 6 | ارواح ***(Arwāḥ)*** | III | 10 | Yes | Yes | No |
| | a) ارواح کی تعریف اور اقسام (Definition of *Arwāḥ* and their classification)<br>b) اطباء کی نظر میں روح کا تصور(Concept of *Rūḥ* according to different Unani Scholars)<br>c) وظائف روح اور مسالک(Functions of *Arwāḥ* and their *Masālik*)<br>d) تنقیہ اور ترویح (*Tanqiya* and *Tarwīḥ*)<br>e) روح کا ارتکاز مختلف اعضاء میں(Concentration of *Rūḥ* in different organs) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | قویٰ (*Quwā*) | III | 20 | Yes | yes | Yes |
| | a) قویٰ کی تعریف اقسام اور وظائف (Definition of *Quwā* with their classification and functions)<br>b) قویٰ نفسانیہ: تعریف مع اقسام، وظائف و عوارضات (*Quwā Nafsāniyya*: definition, classification, functions and complications)<br>c) قویٰ حیوانیہ: تعریف مع اقسام، وظائف و عوارضات (*Quwā Ḥaywāniyya*: definition, classification, functions and complications)<br>d) قویٰ طبعیہ: تعریف مع اقسام و وظائف (*Quwā Ṭabī'iyya*: definition, classification and functions)<br>e) قویٰ تناسلیہ: تعریف اقسام و عوارضات (*Quwā Tanāsuliyya*: definition, classification, and complications)<br>f) افعال کی تقسیم بحیثیت قویٰ (Classification of the *Af'āl* (Functions) according to *Quwā* )<br>g) قویٰ میں باہمی اشتراک اور طبیعت کا کردار (Association amongst *Quwā* and the role of *Ṭabī'at)* | | | | | |
| 8 | افعال (*Af'āl*) | III | 5 | Yes | Yes | No |
| | a) افعال کی تعریف اور اقسام (*Definition and classification of Af'āl*)<br>b) فعل مفرد (*Fi'l Mufrad*)<br>c) فعل مرکب (*Fi'l Murakkab*)<br>d) اعراض افعال (*A'rāḍ Af'āl*) | | | | | |

## 6 G - Question Paper blueprint

| A<br>Question Sr. No. | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| Q1 | Multiple choice Questions (MCQ)<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number 1a./ 1b./ 1c./ 1d./ 1e<br>2. Topic number 2a./ 2b./ 2c./ 2d<br>3. Topic number 2e./ 2f./ 2g<br>4. Topic number 3a./ 3c<br>5. Topic number 3e./ 3f<br>6. Topic number 3g./ 3h./ 3i.<br>7. Topic number 3j./ 3k./ 4a.<br>8. Topic number 4b./ 4c./ 4d.<br>9. Topic number 4e./ 4f./ 4g.<br>10. Topic number 5a./ 5b./ 5c.<br>11. Topic number 5d./ 5e.<br>12. Topic number 5f./ 6a.<br>13. Topic number 6b./ 6c.<br>14. Topic number 6d./ 6e.<br>15. Topic number 7a./ 7b.<br>16. Topic number 7c./ 7d.<br>17. Topic number 7e./ 7f.<br>18. Topic number 8a./ 8b.<br>19. Topic number 8c.<br>20. Topic number 8d. |
| Q2 | Short answer Questions (SAQ)<br>Eight Questions<br>5 Marks Each<br>All compulsory<br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic number 1a./ 1b./ 1d./ 1e.<br>2. Topic number 2a./ 2c./ 2d./ 2g.<br>3. Topic number 3b./ 3i./ 3j./ 3k.<br>4. Topic number 4d./ 4e./ 4f./ 4g.<br>5. Topic number 5a./ 5d./ 5e./ 5f.<br>6. Topic number 6a./ 6c./ 6d./ 6e.<br>7. Topic number 7b./ 7d./ 7f./ 7g.<br>8. Topic number 8a./ 8b./ 8c./ 8d. |
| Q3 | Long answer Questions (LAQ)<br>Four Questions<br>10 marks each<br>All compulsory<br><br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic number 2a, / 2b./ 2c./ 2d./ 2e./ 2f.<br>2. Topic number 3a./ 3b./ 3c./ 3d. / 3f. / 3g. / 3e.<br>3. Topic number 4a./ 4d./ 4e./ 4f. / 4g.<br>4. Topic number 7a./ 7b./ 7d./ 7e. / 7f. |

## 6 H - Distribution of Practical Examination

| SN | Heads | Marks |
|---|---|---|
| 1 | Practical (Total Marks 100) | |
| | Natural position of Arkan/Classification of elements with the help of Periodic Table/Schematic representation of *'Anāṣir Insāniyya* | 30 |
| | Evaluation of *Mizāj Insānī* by questionnaire based on *Ajnās 'Ashara*/ Demonstration of *Iqlīm* by globe and graph/ Explanation of Arwah with innovative methods | 30 |
| | Evaluation of *Ghalaba-i- Akhlāṭ*/ Assessment of *A'ḍā' Mufrada* wa *A'ḍā' Murakkaba*/ Illustration of different *Quwa* | 30 |
| | Record Book | 10 |
| 2 | Viva Voce | 20 |
| 3 | Internal | 20 |
| 4 | Electives | 10 |
| | **Total Marks** | **150** |

## Table 7. Reference Books/Resources:

| S.No: | Name of book | Authors |
|---|---|---|
| 1 | اکسیرالقلوب<br>Ikseer-ul-Qulūb | حکیم محمد اکبر ارزانی<br>Hakim Mohammad Akbar Arzani, Idara Kitab-ul-Shifa. New Delhi, 2019 |
| 2 | کامل الصناعہ<br>Kaamil-as- Sina'ah | علی بن عباس مجوسی<br>Ali Ibn Abbas Majoosi, Idara Kitab-ul-Shifa. New Delhi, 2010 |
| 3 | امور طبیعیہ<br>Introduction to Umūr Tabī'iyya | پروفیسر سید اشتیاق احمد<br>Prof. Syed Ishtiyaq Ahmad Tibbiya College, Karol Bagh, New Delhi.1980. |
| 4 | فردوس الحکمت فی الطب<br>Firdaus-al-Hikmat fil Tibb | علی بن ربن طبری<br>Ali ibn Rabban Tabri Idara, Kitab-ul-Shifa. New Delhi, |

| | | |
|---|---|---|
| | | 2010 |
| 5 | کتاب المرشد<br>Kitabul Murshid (Urdu translation) | حکیم رضی الاسلام ندوی<br>Raziul Islam Nadwi, Anjuman Taraqqi Urdu Bureau. New Delhi, 2000. |
| ,6 | کلیات عصری<br>Kulliyat-e-Asri | پروفیسر سید اشتیاق احمد<br>Prof Syed Ishtiyaq Ahmad, Tibbiya College, Karol Bagh, New Delhi.1983. |
| 7 | کلیات قانون<br>Kulliyat-e-Qanoon | علامہ محمد کبیر الدین<br>Allama Mohammad Kabiruddin, Ajaz Publishing House. Darya Ganj, New Delhi. 2006 |
| 8 | کلیات نفیسی<br>Kulliyat-e-Nafīsi | علامہ محمد کبیر الدین<br>Allama Mohammad Kabiruddin, Idara Kitab-ul-Shifa. New Delhi, 1934 |
| 9 | افادہ کبیر Ifada-e- Kabīr | علامہ محمد کبیر الدین Allama Mohammad Kabiruddin, NCPUL, HRD Ministry, Govt. of India, 2001. |
| 10 | عین الحیٰوۃ<br>Ain al-Hayāt (Urdu translation) | حکیم سید ظل الرحمٰن<br>Hakim Syed Zillur Rahman, Ibn Sina Academy, Aligarh. 2007. |
| 11 | کتاب القویٰ الطبیعیہ<br>Kitab al Quwā al Tabī ‘iyya | حکیم وسیم احمد<br>Hakim Wasim Ahmad, Azra Book Traders, Sir Syed Ahmad Road Darya Ganj, New Delhi 2020. |
| 12 | ذخیرہ خوارزم شاہی<br>Zakheera Khwarazm Shahī | اسماعیل جرجانی<br>Ismail Jurjani, Aijaz Publishing House. Darya Ganj, New Delhi. 2010. |
| 13 | کتاب الکلیات<br>Kitab -al-Kulliyat | علامہ ابن رشد<br>Ibn Rushd, Maktaba Daniyaal, Urdu Bazaar Lahore, 2017. |
| 14 | موجز القانون<br>Mawjaz- al- Qanoon (Urdu translation) | علامہ علاء الدین قرشی<br>Allama Qarshi NCPUL, HRD Ministry, Govt. of India,1984. |

| | | |
|---|---|---|
| 15 | القانون فی الطب<br>Al-Qanoon fil Tibb | ابن سینا<br>Ibn Sina, Ajaz Publishing House. Darya Ganj, New Delhi. |
| 16 | نظریات وفلسفۂ طب<br>Nazariyāt wa Falsafa-i- Tib | انسٹی ٹیوٹ آف ہسٹری آف میڈیسن اینڈ میڈیکل ریسرچ<br>Institute of history of medicine and medical research, Hamdard Buildings, Delhi. 1962. |
| 17 | کتاب فی الارکان<br>Kitab fil Arkān | پروفیسر حکیم سید ظل الرحمٰن<br>Prof. Hkm. Syed Zillur Rahman. Ibn Sina Academy, Aligarh.2008. |
| 18 | کتاب فی المزاج<br>Kitab fil Mizāj | پروفیسر حکیم سید ظل الرحمٰن<br>Prof. Hkm. Syed Zillur Rahman. Ibn Sina Academy, Aligarh.2008 |
| 19 | کتاب فی الفرق الطب<br>Kitab al Firaq at Tib | جالینوس<br>Jalinoos (Urdu Translation by Hakim Zillur Rahman) |
| 20 | کتاب المنصوری<br>Kitab- al-Mansoori | حکیم محمد زکریا رازی<br>Hakim Mohammad Zakariya Razi, CCRUM. New Delhi. 1991. |
| 21 | کتاب المائۃ<br>Kitāb al-Miya | ابو سہل مسیحی<br>Abu Sahl Masihi, CCRUM, New Delhi, 2008. |
| 22 | اطلاقی کلیات<br>Itlaqi Kulliyyāt | پروفیسر ذوالکفل<br>Prof. Mohammad Zulkifle, NIUM, Bangalore.2020. |
| 23 | ٹمپرامینٹولوجی<br>Temperamentology | پروفیسر آئی۔ایچ۔زیدی<br>Prof. I.H. Zaidi, Dept. of Kulliyat, AMU, Aligarh 1991 |
| 24 | کلیات امور طبیعیہ<br>Kulliyāt Umūr Tabī‘iyya | این سی پی یو ایل<br>NCPUL, HRD Ministry, Govt. of India, 2021 |
| 25 | کتاب المختارات<br>Kitab al Mukhtarāt fit Tib | ابن ہبل بغدادی<br>Ibn e Hubal Baghdadi, CCRUM. New Delhi. 2005 |
| 26 | کتاب المرشد | حکیم وسیم احمد |

| | | |
|---|---|---|
| | Kitāb Al Murshid (The Guide) (English translation) | Hakim Wasim Ahmad, Markazi Publications, Jamia Nagar, Okhla, New Delhi 110025, 2021 |
| 27 | اصول طب<br><br>Usool-e-Tib | سید کمال الدین حسین ہمدانی<br><br>Syed Kamaluddin Husain Hamdani, NCPUL, New Delhi |

**********

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS

## (PRESCRIBED BY NCISM)

## TASHREEHUL BADAN
## SUBJECT CODE: UNIUG-TB
## HUMAN ANATOMY

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

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| | | |
|---|---|---|
| 12 | تشریح انسانی<br>Tashreeh e Insani | بیلی رام<br>Beliram LMS |
| 13 | تشریح ہیکل<br>Tashreeh e haikal | سید کمال الدین حسین ہمدانی<br>Kamaluddin Husain Hamdani |
| 14 | تشریح الاحشاء<br>Tashreehul Ahsha | سید کمال الدین حسین ہمدانی<br>Kamaluddin Husain Hamdani |
| 15 | Tashreeh Ahsha تشریح احشاء | محمد احمد لاری<br>M A Lari |
| 16 | تشریح المفاصل<br>Tashreehul Mafasil | محمد احمد لاری<br>M A Lari |
| 17 | تشریح سطحی<br>Tashreeh Sathi | انیس احمد انصاری<br>Anis Ahmad Ansari |
| 18 | تشریح البدن<br>Tashreehul Badan | ہارون منصوری<br>Haroon Mansoori |
| 19 | تشریح العظام<br>Tashreehul Izam | شبیر احمد<br>Shabbir Ahmad |
| 20 | تشریح العضلات<br>Tashreehul Azalat | شبیر احمد<br>Shabbir Ahmad |
| 21 | Human Anatomy – Regional and Applied Part I, II, III | B D Chourasia |
| 22 | General Anatomy | B D Chourasia |
| 23 | Gray's Anatomy 42th edition | Henry Gray |
| 24 | Clinical oriented Anatomy 4th edition | K.L. Koore |
| 25 | Fundamentals of Human Anatomy | N. Chakraborty and D. Chakraborty |
| 26 | Surface and Radiological Anatomy | A. Halim |
| 27 | Tartora's Principles of Anatomy & Physiology | Gerard J Tortora |
| 28 | Anatomy 8th edition | Samar Mitra |
| 29 | Snell's clinical Anatomy | Dr. Lawrence E. Weneski |
| 30 | Fundamentals of Nervous System | A K Anwar |

course curriculum from page no. 1 to 66 is approved for Tashreehul Ba



20/6/2023

20/6/2026 20/6/2

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS

## (PRESCRIBED BY NCISM)

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**I professional BUMS**

Subject Code: **UNIUG-TB**

**Tashreehul Badan**

## KEY POINTS

| **Total number of Teaching hours: 600** | | | |
|---|---|---|---|
| **Lecture hours (LH) - Theory** | | **200 Hours** | **200 Hours (LH)** |
| Paper I | 100 Hours | | |
| Paper II | 100 Hours | | |
| **Non-Lecture hours (NLH) – Theory** | | **120 Hours** | **400 Hours (NLH)** |
| Paper I | 60 Hours | | |
| Paper II | 60 Hours | | |
| **Non-Lecture hours (NLH) - Practical** | | **280 Hours** | |

| **Examination (Papers & Mark Distribution)** | | | | | |
|---|---|---|---|---|---|
| **Item** | **Theory Component Marks** | **Practical Component Marks** | | | |
| | | **Practical** | **Viva** | **Elective** | **IA** |
| **Paper I** | **100** | **100** | **20** | **10** | **20** |
| **Paper II** | **100** | | | | |
| **Sub-Total** | **200** | **150** | | | |
| **Total marks** | **350** | | | | |

## Preface

While discussing the basics of medical science in any system of medicine *Tashreehul Badan* (Human Anatomy) is the most basic and fundamental subject and Sound knowledge of *Tashreehul Badan* is the main building material of a scholar of medical science. One of the differences between an expert and ordinary professional is the in depth understanding of basic subjects. *Tashreehul Badan* is one of the most fundamental of all medical sciences because of its involvement with structure of human body. *Tashreehul Badan* including general, regional and systemic, is primarily the scientific study of the morphology of the human body. It also provides the basic framework and vocabulary used in all descriptions and communications about the body. *Tashreehul Badan* can be taught regionally or systemically, that is, respectively, studying *Tashreehul Badan* by bodily regions such as the head, neck, thorax, abdomen and limbs or studying by specific systems, such as the nervous or respiratory systems. Students as well as the healthcare professionals, sportsmen or professionals collaborating with the medical field will find it impossible to make progress without the sound knowledge of *Tashreehul Badan.* Unani and other Professionals associated with the regimens of pain relief finds it most difficult to cure a specific pain without the knowledge of macroscopic and microscopic *Tashreeh* of that area. A thorough working knowledge of *Tashreehul Badan* is required by physicians, especially surgeons and doctors working in some diagnostic specialties, such as histopathology and radiology. Good teaching methods are the backbone for the understanding of any subject and these should be chosen very carefully according to the needs of the subject and as far as *Tashreehul Badan* is concerned there are lots of method of teaching and learning *Tashreehul Badan* in which some of the important ones are human structure models, skeletons, textbooks, diagrams, photographs, lectures and tutorials, and in addition, medical students generally also learn gross anatomy through practical experience of dissection and inspection of cadavers. Methods have also improved dramatically, advancing from examination through dissection of cadavers to technologically complex techniques developed including X-ray, ultrasound, and MRI. The study of microscopic anatomy (or histology) can be aided by practical experience examining histological preparations (or slides) under a microscope. So, in a nutshell *Tashreehul Badan* is a complementary basic medical science, which is taught to medical students in their first year at medical school so that their intellectual pursuits regarding medicine are enhanced.

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**First BUMS**

**Course Code and Names of Course**

| | Course code | Name of Course |
|---|---|---|
| | UNIUG-TB | Tashreehul Badan (Human Anatomy) |
| | | |

**Table 1- Course outcomes and matched Program outcomes**

| SR1<br>CO<br>No | A1<br>Course Outcome (CO) UNIUG-TB<br>At the end of the course UNIUG-TB, the student should be able to- | B1<br>Course Outcome matched with program outcomes |
|---|---|---|
| CO1 | Describe fundamental aspects of Tashreeh ul badan تشریح البدن (Human Anatomy). | PO1, PO2 |
| CO2 | Understand the discuss Satehi Tashreeh سطحی تشریح (Surface Anatomy) along with Jarahiyati جراحیاتی (Surgical) importance as well as Itlaqi Tashreeh اطلاقی تشریح (Applied Anatomy). | PO2,PO7,PO3 |
| CO3 | Describe and role of Tashreeh ul badan تشریح البدن (Human Anatomy) in Jarahat جراحت (Surgery). | PO2,PO7,PO8 |
| CO4 | Discuss role of Tashreeh ul badan تشریح البدن (Human Anatomy) in Tashkhees-e-marz تشخیص مرض (diagnosis of a disease) in Matab مطب clinic. | PO4,PO2,PO5 |
| CO5 | Understand and interpret radiological investigations more efficiently due to his/her detailed training in Tashreeh e shuaee تشریح شعاعی (Radiological anatomy). | PO2,PO4,PO6 |
| CO6 | Understand and read Nabzنبض (pulse) efficiently with the help of detailed training in Ilm e urooqi علم عروقی (Angiology). | PO2,PO4,PO6 |
| CO7 | Discuss Ilaj bit tadbeerعلاج بالتدبیر (Regimenal therapy) procedures with knowledge of Ilmulezaam علم العظام (Osteology), Ilm e urooqiعلم عروقی (Angiology) as well as Ilmulazlat علم العضلات (Myology) | PO2,PO7,PO8,PO3 |

**Table 2: Contents of Tashreehul Badan - Paper – I (Theory)**

| | A2<br>List of Topics UNIUG-TB | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| 1 | (Tashreeh ul Badan ka ta'aruf) تشریح البدن کا تعارف<br><br>**Introduction of Human Anatomy (General Anatomy)** | I | 10 | 10 | 10 |
| | **(a) *Nizame Jismani ka mukhtasar ta' aruf***<br>نظام جسمانی کا مختصر تعارف<br>A brief description of systems of the Body) | | | | |
| | **(b) *Tashreehi waz'a wa Muta'alliqa istilahat***<br>تشریحی وضع و متعلقہ اصطلاحات<br>(Anatomical position and related terminologies) | | | | |
| | **(c) Jild aur uske zawaid**<br>**جلد اور اسکے زوائد**<br>(Skin and its appendages) | | | | |
| | **(d) Lafaife satahiya wa ghaairah**<br>**لفائف سطحیہ و غائرہ**<br>(Superficial and deep Fasciae) | | | | |
| | **(e) Autar, Rabatat aur Akyase zulaliya**<br>**اوتار رباطات اور اکیاس زلالیہ**<br>(Tendon, Ligaments and Bursae) | | | | |
| | **(f) Izaam: Aqsaam, af'aal wa ta'azzum**<br>**عظام،اقسام، افعال وتعظم**<br>Bones: (Types, functions and ossification) | | | | |
| | **(g) Azlaat: Aqsaam wa af'aal**<br>**عضلات، اقسام و افعال**<br>Muscles(Types and functions) | | | | |
| | **(h) Mafasil, Aqsaam wa harakaat**<br>**مفاصل، اقسام و حرکات**<br>(Joints, Types and movements) | | | | |
| | **(i) Ilmul janeen wa nasliyat**<br>**علم الجنین و نسلیات**<br>(General Embryology and Genetics) | | | | |
| 2 | **Raas** راس<br>**(Head )** | I | 20 | 10 | 5 |
| | **(a) Jumjumah aur uske manaazir ka aam bayaan**<br>**جمجمہ اور اسکے مناظر کا بیان**<br>(General description and views of Skull). | | | | |
| | **(b) Mufsal Sudughi fakki**<br>**مفصل صدغی فکی**<br>(Temporomandibular joint) | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | **(c) Jaufe Fam, Lisaan, Asnaan wa Halaq**<br>**جوف فم، لسان، اسنان و حلق**<br>(Oral Cavity, Gums, Teeth and Pharynx) | | | | |
| | **(d) Anaf, Jaufe Anf wa Khalaye Hawaiyah**<br>**انف،جوف انف وخلایا ہوائیہ**<br>(Nose, nasal cavity and Paranasal sinuses) | | | | |
| | **(e) Uzn اذن**<br>(Ear) | | | | |
| | **(f) Mashmoolate Mahjar**<br>**مشمولات محجر**<br>(Contents of Orbit): **Aj'faan اجفان** (Eyelids) | | | | |
| | **(g) Aalate dam'a آلات دمع** (Lacrimal apparatus) and **Muqlatul Ain مقلۃ العین**(Eye ball) | | | | |
| | **(h) Ghudade Lu'abiya**<br>**غدد لعابیہ**<br>(Salivary glands) | | | | |
| 3 | **Unq عنق**<br>**(Neck)** | II | 10 | 10 | 5 |
| | **(a) Musallasate Unq ka mukhtasar bayaan**<br>**مثلثات عنق کا مختصر بیان**<br>(Brief description of Triangles of the Neck) | | | | |
| | **(b) Azlaate Unq**<br>**عضلات عنق**<br>(Muscles of the Neck) | | | | |
| | **(c) Urooq wa a'asab**<br>**عروق و اعصاب**<br>(Vessels and nerves) | | | | |
| | **(d) Hanjarah wa Qasbatur riyah**<br>**حنجرہ و قصبۃ الریہ**<br>(Larynx and Trachea) | | | | |
| | **(e) Mari**<br>**مری**<br>(Oesophagus) | | | | |
| | **(f) Raas wa Unq ke Ghudade Lymphawiyah**<br>**راس و عنق کے غدد لمفاویہ**<br>(Lymph nodes of Head and neck) | | | | |
| | **(g) Fuqrate Unq**<br>**فقرات عنق**<br>(Cervical Vertebrae) | | | | |
| | **(h) Ghudade Darqiyah wa Jaar darqiyah**<br>**غدد درقیہ وجار درقیہ**<br>(Thyroid and parathyroid glands) | | | | |
| 4 | **Nizame A'asab**<br>**نظام اعصاب**<br>**(Nervous system)** | II | 10 | 15 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| | **(a) Aghshiya-e-Dimagh, Dimagh aur Nukha'a ka mukhtasar bayaan**<br>**اغشیہ دماغ، دماغ اور نخاع کا مختصر بیان**<br>(A brief description of Meanings, Brain and spinal cord) | | | | |
| | **(b) A'asabe Nukha wa Dimaghi**<br>**اعصاب نخاع و دماغی**<br>(Cranial and Spinal nerves) | | | | |
| 5 | **Sadr**<br>**صدر**<br>**(Thorax)** | II | 30 | 35 | 20 |
| | **(a) Jaufe Sadr**<br>**جوف صدر**<br>(Thoracic Cavity) | | | | |
| | **(b) Azla'a, Azmul Qas wa fuqraate sadr**<br>اضلاع عظم القص و فقرات صدر<br>(Ribs, Sternum and Thoracic Vertebrae) | | | | |
| | **(c) Azlaate sadr**<br>**عضلات صدر**<br>(Muscles of the Thorax) | | | | |
| | **(d) Ghishaur riyah wa riyatain**<br>غشاءالریہ و ریتین<br>(Pleura and Lungs) | | | | |
| | (e) **Hijabe munassifussadr wa mashmoolat**<br>**حجاب منصف الصدر و مشمولات**<br>(Mediastinum & its contents) | | | | |
| | **(f) Urooq wa A'asab aur majrae sadr**<br>**عروق و اعصاب اورمجری صدر**<br>(Vessels, Nerves and Thoracic duct) | | | | |
| | **(g) Ghilaful qalb wa Qalb**<br>**غلاف القلب و قلب**<br>(Pericardium and Heart) | | | | |
| | **(h) Hijabe Hajiz**<br>**حجاب حاجز**<br>(Diaphragm) | | | | |
| | **(i) Saddyain**<br>ثد یئین<br>(Mammary Gland) | | | | |
| 6 | **Tarfe A'ala**<br>**طرف اعلی'**<br>**(Upper Limb)** | III | 20 | 20 | 15 |
| | **(a) Izam**<br>**عظام**<br>(Bones) | | | | |
| | **(b) Azlaat**<br>**عضلات** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | (Muscles) | | | | |
| | **(c) Mafasil**<br>**مفاصل**<br>(Joints) | | | | |
| | **(d) Ibt wa hufrae mirfaqiyah**<br>ابط و حفرہ مرفقیہ<br>(Axilla and Cubital fossa) | | | | |
| | **(e) Urooq wa A'asab**<br>**عروق و اعصاب**<br>(Vessels and nerves) | | | | |
| **Total** | | | | **100** | **60** |

**Table 2: Contents of Tashreehul Badan – Paper – II (Theory)**

| | **A2**<br>**List of Topics UNIUG-TB** | **B2**<br>**Term** | **C2**<br>**Marks** | **D2**<br>**Lecture hours** | **E2**<br>**Non-Lecture hours** |
|---|---|---|---|---|---|
| 1 | **(Batan) بطن**<br>**(Abdomen)** | II | 40 | 40 | 30 |
| | a. **اقسام بطن(Aqsam-e-Baṭan)**<br>**(Abdominal regions)** | | | | |
| | b. **مقدم دیوار بطن**<br>**(Muqaddam Deewar-e-Baṭan)**<br>**(Anterior Abdominal wall)** | | | | |
| | c. **عضلہ موربہ ظاہرہ اور موربہ غائرہ**<br>**External Oblique and Internal Oblique muscle** | | | | |
| | d. **عضلہ مستعرضہ بطنیہ و مستقیمہ بطنیہ**<br>**Transversus Abdominis and Rectus Abdominis muscle** | | | | |
| | e. **لفافہ مستقیمہ(Rectus sheath)** | | | | |
| | f. **عضلہ معلقۃ الخصیہ و مخروطیہ( Cremaster and Pyramidalis muscle)** | | | | |
| | g. **دیوار بطن کے اعصاب و عروق**<br>**Arteries and nerves of the anterior abdominal wall** | | | | |
| | h. **لفافہ مستعرضہ(Fascia Transversalis)** | | | | |
| | i. **خطہ اربیہ و قنات اربیہ**<br>**Inguinal region (groin) and Inguinal canal** | | | | |
| | j. **باریطون، ثرب، ماساریقا (Peritoneum, Omentum and Mesentry)** | | | | |

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|---|---|---|---|---|---|
| | k. رباطات باریطون (Ligaments of peritoneum) | | | | |
| | l. مری کا بطنی حصہ اور اطلاقی تشریح<br>Abdominal part of the Oesophagus and its applied anatomy | | | | |
| | m. معدہ اور اطلاقی تشریح Stomach and its applied anatomy | | | | |
| | n. اثنا عشری اور اطلاقی تشریح (Duodenum and its applied anatomy) | | | | |
| | o. معاء صائم اور اطلاقی تشریح (Jejunum along with its applied anatomy) | | | | |
| | p. معاء لفائفی اور اطلاقی تشریح (Ileum along with its applied anatomy) | | | | |
| | q. کبد اور اطلاقی تشریح (Liver and its applied anatomy) | | | | |
| | r. ورید باب الکبد اور اطلاقی تشریح (Portal vein and its applied anatomy) | | | | |
| | s. آلات صفراویہ کبدی خارجی اور اطلاقی تشریح<br>Extrahepatic Biliary Apparatus along with its applied anatomy | | | | |
| | t. بانقراس اور اطلاقی تشریح (Pancreas and its applied anatomy) | | | | |
| | u. طحال اور اطلاقی تشریح (Spleen and its applied anatomy) | | | | |
| | v. اعور اور اطلاقی تشریح (Caecum and its applied anatomy) | | | | |
| | w. زائدہ دودیہ اور اطلاقی تشریح (Appendix and its applied anatomy) | | | | |
| | x. قولون اور اطلاقی تشریح (Colon and its applied anatomy) | | | | |
| | y. ورید ماساریقا اعلیٰ واسفل (Superior and Inferior Mesenteric Vessels) | | | | |
| | z. کلیتین اور اطلاقی تشریح (Kidneys and its applied anatomy) | | | | |
| | aa. اعضاء زنانہ و مردانہ خارجی اور اطلاقی تشریح<br>External male and female genital organs and its applied anatomy | | | | |
| | bb. غدہ فوق الکلیہ اور اطلاقی تشریح<br>Suprarenal Glands and its applied anatomy | | | | |
| | cc. دیوار بطن مؤخر (Posterior Abdominal Wall) | | | | |
| | dd. اوردہ بطنی (Abdominal Aorta) | | | | |
| | ee. اجوف اسفل (Inferior Vena Cava) | | | | |
| 2 | **(*A'ana wa ejan*) *عانہ و عجان***<br>**(Pelvis and perineum)** | III | 30 | 30 | 15 |
| | **(a) *Hauz e A'anaa aur Ejan***<br>***حوض عانہ اور عجان***<br>(Pelvis, perineum and Ischiorectal fossa) | | | | |
| | **(b) *Azmul ajuz wa- us'us***<br>***عظم العجز و عصعص***<br>(Sacrum and coccyx) | | | | |

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|---|---|---|---|---|---|
| | **(c) *Azlaate A'ana***<br>***عضلات عانہ***<br>(Muscles and joints of pelvis) | | | | |
| | **(d) *Ah'shae Aana***<br>***احشاء عانہ***<br>(Pelvic viscera and External Male/Female sex organs) | | | | |
| 3 | ***Tarfe Asfal* طرف اسفل**<br>**(Lower Limb)** | I | 30 | 30 | 15 |
| | **(a) *Izaam***<br>***عظام***<br>(Bones) | | | | |
| | **(b) *Azlaat***<br>***عضلات***<br>(Muscles) | | | | |
| | **(c) *Mafasil***<br>***مفاصل***<br>(Joints) | | | | |
| | **(d) *Urooq wa A'asab***<br>***عروق و اعصاب***<br>(Vessels and nerves) | | | | |
| | **(e) *Hufrajat***<br>***حفراجات***<br>(Fossae) | | | | |
| | **(f) *Musallase Fakhzi***<br>مثلث فخذی<br>(Femoral triangle) | | | | |
| | **(g) *Qanate Muqarribah***<br>***قنات مقربہ***<br>(Adductor canal) | | | | |
| | **(h) *Hufrae mabiziyah***<br>حفرہ مابضیہ<br>(Popliteal fossa) | | | | |
| **Total** | | | | **100** | **60** |

**Table 2: Contents of Tashreehul Badan – (Practical)**

| | **A2**<br>**List of Topics UNIUG-TB** | **B2**<br>**Term** | **C2**<br>**Marks** | **D2**<br>**Lecture hours** | **E2**<br>**Non-Lecture hours** |
|---|---|---|---|---|---|
| 1 | (A) Brief description of Anatomy Law, Preservation of Cadaver, Body parts and Specimen. | I | 20 | | 60 |

| | | | | | |
|---|---|---|---|---|---|
| | (B) Prosection of the parts of the body (Cadaver, Audio-Visual aids or other techniques available e.g., CD's, Software or other advanced technology) | I, II | | | |
| | (C) Dissection/Demonstration of the parts of the body (Cadaver, Audio-Visual aids or other techniques available e.g., CD's, Software or other advanced technology) | II, III | | | |
| 2 | Osteology and Arthrology with the help of bones, models, charts, X-Ray and specimens.<br>• Bones and Joints of Neurocranium<br>• Bones and Joints of Viscerocranium<br>• Bones and Joints of Lower limb | I | 30 | | 100 |
| | • Bones and Joints of Thoracic cage<br>• Vertebral column and associated Joints | II | | | |
| | • Bones and Joints of Upper limb<br>• Bones and Joints of Pelvis<br>• Associated Radiological Anatomy of all above | III | | | |
| 3 | Practical study of all viscera of body with the help of models, charts and specimens. | | 30 | | 100 |
| | • Brain & Spinal cord | I | | | |
| | • Viscera and glands of neck<br>• Lungs & Heart<br>• Abdominal Viscera | II | | | |
| | • Pelvic Viscera<br>• Fossae and structures of Upper and lower Limb - Cubital and Popliteal fossa | III | | | |
| 4 | Study of Anatomy on living subject (Patient)<br>• Inspection, Palpation of Abdominal Viscera<br>• Counting of Ribs<br>• Clinical or Applied Anatomy<br>• Heart/Lung sounds with demonstration of Auscultatory<br>• Identification of different bony landmarks<br>• Deep tendon reflexes<br>• Superficial reflexes | III | 20 | | 20 |
| **Total** | | | | | **280** |

**Table 3: Learning objectives of Tashreehul Badan UNIUG-TB Paper – I (Theory)**

| 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 to know | E3 Level Does/shows/ Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Inegration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- Tashreehul Badan ka ta'aruf (General Human Anatomy)** (Lecture:- **10** hours, Non lecture **10** hrs) | | | | | | | | | |
| CO1,<br>CO6 | Describe<br>-Introduction and history of anatomy<br>-Subdivision of anatomy | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1,CO5 | Describe briefly all systems of the Body | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1,CO5 | Describe positions and planes of the body | Cognitive/ Comprehension | MK | Knows how | Animation/Lecture | Written &viva | F&S | I | Surgery and Radiology |
| CO1,CO5 | Describe<br>-Anatomical terms: | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1,CO5 | Describe Body regions: Body cavities (major & minor) | Cognitive/ Recall | MK | Knows how | Lecture/ Discussion | Written &viva | F&S | I | Radiology |
| CO1 | Describe layers and surface pattern of skin | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | Dermatology |
| CO1 | Describe Appendages of skin(Glands and specialised cells) | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1 | Describe functions of skin | Cognitive/ Recall | DK | Knows | Lecture | Written &viva | F&S | I | |
| CO1 | Describe Dermatomes and Angiosomes of skin | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1 | Estimate surface area of skin affected by burn | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1 | Describe anatomy of ageing skin | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1 | Describe Superficial and deep Fasciae | Cognitive/ Recall | DK | Knows | Lecture/ Discussion | Written &viva | F&S | I | |
| CO1,CO2 | Describe Tendon, Ligaments & Bursae | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1 | Describe Bones and Cartilages | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | Orthopedics |
| CO1 | Describe Muscular system:<br>Naming of muscles<br><br>-According to location<br>-According to shape<br>-According to number of heads<br>-According to attachments<br>-According to action<br>-According to direction of fibres | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | Pain clinic |

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|---|---|---|---|---|---|---|---|---|---|
| | -According to size of muscle | | | | | | | | |
| CO1 | Describe Gross features of a typical skeletal muscle | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1 | Describe Joints | Cognitive/ Recall | MK | Knows | Animation/Lecture | Written &viva | F&S | I | Orthopedics |
| CO1 | DescribeVertebral column: | Cognitive/ Recall | MK | Knows | Animation/Lecture | Written &viva | F&S | I | Orthopedics and Pain clinic |
| CO2,CO7 | Describe Blood vessels:<br>-Anastomosis:<br>-Types of blood circulation | Cognitive/ Application | MK | Knows how | Lecture | Written &viva | F&S | I | Cardiology |
| CO2,CO7 | Describe:<br>-Lymphatic system<br>-Components of lymphatic system | Cognitive/ Application | MK | Knows how | Lecture | Written &viva | F&S | I | Medicine |
| CO2,CO7 | Describe General Embryology and genetics | Cognitive/ Application | MK | Knows how | Lecture | Written &viva | F&S | I | |
| **Topic 2 - *Raas* (Head)** (Lecture:- **10** hours, Non lecture **5** hrs) | | | | | | | | | |
| CO1,CO6 | Describe Scalp | Cognitive/Comprehension | MK | Knows how | Lecture | Written | F&S | I | |
| CO1,CO5 | Explain Temporomandibular Joint | Cognitive/Comprehension | MK | Knows how | Lecture /Video | Written | F&S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1,CO5 | Describe Cranial cavity | Cognitive/Comprehension | DK | Knows how | Lecture /Video | Written &viva | F&S | I | |
| CO1,CO5 | Describe Cranial fossae and foramina of skull | Cognitive/Comprehension | DK | Knows how | Lecture /Video | Written &viva | F&S | I | |
| CO1,CO5 | Explain Articulations of Skull | Cognitive/Comprehension | MK | Knows how | Animation/Lecture | Written | F&S | I | |
| CO1,CO5 | Explain Fontanelles | Cognitive/Recall | MK | Knows | Lecture/Video | Written | F&S | I | |
| CO1,CO5 | Explain Venous sinuses of skull | Cognitive/Comprehensive | MK | Knows | Lecture/Video | Written | F&S | I | |
| CO1,CO5 | Describe sutures and related bony landmarks of skull | Cognitive/Recall | MK | Knows | Animation & Lecture | Written &viva | F&S | I | |
| CO1,CO5 | Describe Normae<br>-Norma verticalis<br>-Norma occipitalis<br>-Norma lateralis<br>-Norma frontalis<br>-Norma basalis | Cognitive/Recall | MK | Knows | Lecture/Maps | Written &viva | F&S | I | Radiology |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Explain Pterion | Cognitive/Recall | MK | Knows | Departmental Seminar & Lecture | Written &viva | F&S | I | |
| CO1 | Explain Mastoid and Styloid Process | Cognitive/Recall | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO5 | Describe bones of the neurocranium:<br>-Parietal<br>-Frontal<br>-Temporal<br>-Occipital<br>-Ethmoid<br>-Sphenoid | Cognitive/Recall | MK | Knows | Lecture | Written &viva | F&S | I | Radiology |
| CO1,CO5 | Describe bones of the viscerocranium:<br>-Mandible<br>-Maxilla<br>-Zygomatic<br>-Nasal<br>-Lacrimal<br>-Vomer<br>-Platine<br>-Inferior choncha | Cognitive/ Recall | MK | Knows | Departmental Seminar/Lecture | Written &viva | F&S | I | |
| CO1 | Explain orbit, extra ocular muscles, eyelids and eyeball | Cognitive/ Comprehension | DK | Knows how | Departmental Seminar/Lecture | Written &viva | F&S | I | Opthalmology |
| CO1 | Explain Lacrimal | Cognitive/ Comprehension | DK | Knows how | Animation/Lecture | Written &viva | F&S | I | Opthalmology |

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|---|---|---|---|---|---|---|---|---|---|
| | apparatus | | | | | | | | |
| CO1 | Enlist Para nasal Sinuses | Cognitive/ Comprehension | MK | Knows | Lecture/ Video | Written &viva | F&S | I | |
| CO1,CO2 | Describe Special features of the new born skull | Cognitive/ Comprehension | NK | Knows | Early Clinical exposure | Written &viva | F&S | I | Obstetrics |
| CO1 | Explain Teeth | Cognitive/ Recall | NK | Knows | Lecture/Animation | Written &viva | F&S | I | |
| CO1,CO4 | Describe Tongue, taste buds and papillae | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1, CO | Describe Salivary Glands | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1, CO4 | Explain Oral cavity | Cognitive/ Comprehension | DK | Knows | Lecture / Discussion | Written &viva | F&S | I | ENT |
| CO1,CO3 | Explain Nose, Nasal septum and Nasal cavity | Cognitive/ Comprehension | MK | Knows how | Lecture/Video | Written &viva | F&S | I | ENT |
| CO1,CO4 | Describe Ear and Ear ossicles | Cognitive/ Comprehension | MK | Knows how | Lecture &Video | Written &viva | F&S | I | ENT |
| CO1 | Enlist Muscles of Mastication | Cognitive/ Recall | MK | Knows how | Lecture | Written &viva | F&S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Enlist Muscles of Face | Cognitive/ Recall | MK | Knows | Lecture/Project based learning | Written &viva | F&S | I | |
| CO1 | Enlist Muscles of Head | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO4 | Describe Infra temporal fossa | Cognitive/ Comprehension | NK | Knows | Lecture and Video | Written &viva | F&S | I | Radiology |
| CO1,CO4 | Describe pterygopalatine fossa: | Cognitive/ Comprehension | NK | Knows | Lecture and Video | Written &viva | F&S | I | |
| CO1,CO4 | Describe Auditory tube | Cognitive/ Comprehension | NK | Knows | Lecture | Written &viva | F&S | I | ENT |
| CO2,CO7 | Explain applied Anatomy of Head | Cognitive/ Application | MK | Knows | Animation/Lecture | Written &viva | F&S | I | |
| **Topic 3 - *Unq* (Neck)** (Lecture:- **10** hours, Non lecture **5** hrs) | | | | | | | | | |
| CO1,CO6 | Describe Pharynx:<br><br>-Nasopharynx:<br>-Oropharynx:<br>-<br>Laryngopharynx: | Cognitive/ Comprehension | MK | Knows | Lecture/Video | Written &viva | F&S | II | |
| CO1,CO6 | Describe Palate | Cognitive/ Comprehension | MK | Knows | Lecture/ Discussion | Written &viva | F&S | II | |
| CO1,CO5 | Describe palatine tonsils | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1,CO5 | Enlist bones of Neck<br>-Cervical Vertebrae<br>- Hyoid | Cognitive/ Comprehension | DK | Knows how | Lecture/ Departmental Seminar | Written &viva | F&S | II | |
| CO1,CO5 | Explain Waldeyer's ring | Cognitive/ Comprehension | MK | Knows | Lecture /Video | Written &viva | F&S | II | |
| CO1,CO5 | Describe Atlanto Axial Joint | Cognitive/ Comprehension | DK | Knows how | Lecture/Animation | Written &viva | F&S | II | |
| CO1,CO5 | Describe Atlanto Occipital Joint | Cognitive/ Recall | DK | Knows how | Lecture | Written) &viva | F&S | II | |
| CO1,CO5 | Describe Larynx:<br>-Cartilages<br>-Ligaments<br>-Membranes<br>-Joints<br>-Cavity<br>-Muscles<br>Extrinsic<br>Intrinsic | Cognitive/ Recall | MK | Knows | Lecture | Written) &viva | F&S | II | ENT |
| CO1 | Explain Thyroid Gland | Cognitive/ Comprehension | DK | Knows | Lecture / Discussion | Written &viva | F&S | II | |
| CO1,CO2 | Describe Oesophagus and associated applied aspect | Cognitive/Recall | MK | Knows | Lecture | Written &viva | F & S | II | |
| CO1,CO2 | Describe Trachea and associated applied aspect | Cognitive/Recall | MK | Knows | Lecture/Video | Written &viva | F & S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1 | Explain Para Thyroid Gland | Cognitive/Recall | DK | Knows | Lecture/ Discussion | Written &viva | F&S | II | |
| CO1,CO2 | Explain Triangles of Neck:<br>-Boundaries<br>-Divisions<br>-Contents | Cognitive/ Comprehension | MK | Knows | Lecture/Animation | Written &viva | F&S | II | |
| CO1 | Enlist Muscles of Neck<br>-Anterior<br>-Superficial<br>-Suprahyoid<br>-Infrahyoid<br>-Anterior vertebral<br>-Lateral vertebral<br>-Posterior<br>-Deep | Cognitive/ Recall | MK | Knows | Lecture/Video | Written &viva | F&S | II | Orthopedics |
| CO1 | Enlist Fascia of Neck | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | II | |
| CO1 | Describe Pharyngeal arches | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | II | |
| CO1 | Enlist Vessels of Neck:<br>-Common carotid artery (Carotid sheath, carotid sinus and carotid body) | Cognitive/ Recall | MK | Knows | Lecture/ Discussion | Written &viva | F&S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | -Vertebral artery<br>-Thyrocervical trunk<br>-Jugular veins | | | | | | | | |
| CO2,CO7 | Describe Pretracheal and Prevertebral fascia | Cognitive/ Application | MK | Knows how | Lecture | Written &viva | F&S | II | |
| CO2,CO7 | Describe Applied Anatomy of Neck | Cognitive/ Application | MK | Knows how | Early clinical exposure | Written &viva | F&S | II | |
| **Topic 4 -** ***Nizame A'asab wa dimaghiya***(Nervous System**)** (Lecture:- **15** hours, Non lecture **5** hrs) | | | | | | | | | |
| CO1,CO2 | Explain division of the NS | Cognitive/Recall | MK | Knows | Lectures / group discussion, | Written / viva | F&S | II | |
| CO1,CO2, CO6 | Explain meninges<br>-Duramater:<br>-Arachnoid mater<br>-Piamater | Cognitive/Recall | MK | Knows | Lecture/ Animation | Written / viva | F & S | II | |
| CO1,CO2 | Demonstrate diagram of meninges | Cognitive/ Comprehension | MK | Knows | demonstration | practical and viva | F & S | II | |
| CO1,CO5, CO2 | Describe Brain<br>-<br>Prosencephalon<br>-<br>Mesencephalon<br>-<br>Rhombencephalon | Cognitive/Recall | MK | Knows | lecture | Written / viva | F & S | II | Neurology |

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|---|---|---|---|---|---|---|---|---|---|
| CO1,CO5, CO2 | Describe Spinal cord -TS of spinal cord -Blood supply -Meninges -Denticulate ligament | Cognitive/Recall | MK | Knows | Animation/Lecture | Written / viva | F & S | II | Neurology |
| CO1,CO2 | Describe Peripheral nervous system -Spinal nerves | Cognitive/Recall | MK | Knows | Lectures | Written / viva | F&S | II | |
| CO1,CO2 | Describe Cranial nerves | Cognitive/Recall | MK | Knows | Lectures/ Discussion | Written / viva | F&S | II | |
| CO1,CO2 | Describe Autonomic Nervous System - Sympathetic Nervous System (thoracolumbar outflow) - Parasympathetic Nervous System (cranio-sacral outflow) - Enteric Nervous System (ENS) | Cognitive/Recall | MK | Knows | Lectures | Written / viva | F&S | II | |
| CO1,CO2 | Explain Ventricles of Brain | Cognitive/Recall | MK | Knows | Lectures / discussion, | Written / viva | F&S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1,CO2 | Draw diagram of brain | Cognitive/Recall | MK | Knows | Animation/Lectu re) | Practical and viva | F & S | II | |
| CO1 | Draw diagram of spinal cord | Cognitive/Recall | DK | Knows How | Lecture/Animati on | practical | F & S | II | |
| CO1,CO3, CO2 | Describe Structure of neuron | Cognitive/Recall | DK | Knows | Lecture/Maps | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain supporting cells of Neuron -Neuroglia (CNS) -Schwann and Satellite (PNS) | Cognitive/Recall | DK | Knows | Lecture/Video | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain Cerebrospinal fluid | Cognitive/Recall | MK | Knows | Lecture/Maps | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain Limbic system | Cognitive/Recall | DK | Knows | Lecture | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain Thalamus & Hypothalamus | Cognitive/Recall | MK | Knows | Lecture | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain Pineal body | Cognitive/Recall | DK | Knows | Lecture / /Animation | viva and practical | F & S | II | |
| CO1,CO3, CO2 | Explain Circle of Willis | Cognitive/Recall | MK | Knows | Guest Lecture/Video | viva and practical | F & S | II | |
| CO1,CO2 | Describe Sensory system | Cognitive/Recall | MK | Knows | Lecture | Written / viva | F & S | II | |
| CO1,CO3 | Describe motor system | Cognitive/Recall | MK | Knows | Lecture | Written / viva | F & S | II | Neurology |

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|---|---|---|---|---|---|---|---|---|---|
| CO1,CO2 | Identify Prenatal and post-natal development of brain | Cognitive/ Comprehension | NK | Shows | Lecture/Maps | practical and viva | F & S | II | |
| **Topic 5- *Sadr*** (Thorax**) Time** (Lecture:- **35** hours, Non lecture **20** hrs) | | | | | | | | | |
| CO1 | Describe Thoracic wall, its functions and associated applied aspect<br>-Muscles<br>-Joints<br>-Costal Cartilages | Cognitive/Recall | MK | Knows | Lectures/group discussion /Demonstration | Written &viva | F & S | II | |
| CO1,CO2 | Describe Mediastinum and its Division | Cognitive/Recall | MK | Knows | Lectures/ video | Written &viva | F & S | II | |
| CO1,CO2 | Describe Thoracic Cavity and suprapleural membrane | Cognitive/Recall | MK | Knows | Departmental Seminar & Demonstration | Written &viva | F & S | II | |
| CO3<br>CO1 | Describe Sternal angle/ Angle of Louis | Cognitive/Recall | DK | Knows | Lecture/Maps | Written &viva | F & S | II | |
| CO1<br>CO2 | Describe Bones of Thorax and associated applied aspect<br>-Sternum | Cognitive/Recall | MK | Knows | Lectures/ group discussion | Written &viva | F & S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | -Thoracic vertebra<br>-Rib | | | | | | | | |
| CO3<br>CO1 | Describe Intercostal space<br>-Muscles<br>-<br>Neuromuscular bundle | Cognitive/Recall | DK | Knows | Lectures/ group discussion | Written &viva | F & S | II | |
| CO1,CO2 | Describe Pleura and associated applied aspect | Cognitive/Recall | MK | Knows | Lecture/Maps | Written &viva | F & S | II | |
| CO3 | Describe Lungs and associated applied aspect | Cognitive/Recall | MK | Knows | Lectures/ video | Written &viva | S | II | |
| CO1, CO2,CO5 | Describe Diaphragm and associated applied aspect | Cognitive/Recall | MK | Knows | Animation/Lecture | Written &viva | F & S | II | |
| CO1, CO2, CO5 | Describe Mammary Gland) and associated applied aspect | Cognitive/Recall | MK | Knows | Lectures/group discussion | Written &viva | F& S | II | |
| CO1,CO2 | Describe Pericardium and associated applied aspect | Cognitive/Recall | MK | Knows | Lectures / Maps | Written &viva | F & S | II | |
| CO1, CO3, CO6, CO7 | Describe Heart and associated | Cognitive/Comprehension | DK | Knows | Lecture/Maps | Written &viva | F & S | II | |

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| | applied aspect | | | | | | | | |
| CO1,CO2 | Describe Azygos system of Veins | Cognitive/Recall | MK | Knows | Lecture/ Discussion | Written &viva | F & S | II | |
| CO1 | Describe Aorta | Cognitive/Recall | MK | Knows | Lecture/Maps | Written &viva | F & S | II | |
| CO1,CO2 | Describe Superior and Inferior Vena cava | Cognitive/Recall | MK | Knows | Lectures | Written &viva | F & S | II | |
| CO1,CO2 | Explain Thoracic duct | Cognitive/Recall | MK | Knows | Lectures/ discussion | Written &viva | F & S | II | |
| CO1 | Enlist Arteries and veins of Thorax | Cognitive/Recall | DK | Knows | Small group discussion and lecture | Written &viva | F & S | II | |
| CO1 | Describe Thymus | Cognitive/Recall | DK | Knows | Lectures | Written &viva | F & S | II | |
| **Topic 6 - *Tarfe A'ala* (Upper Limb)** (Lecture:- **20** hours, Non lecture **15** hrs) | | | | | | | | | |
| CO1,CO6 | Describe Bones of the pectoral (shoulder) girdle and associated applied aspect -Clavicle -Scapula | Cognitive/ Comprehension | MK | Knows how | Lecture/Maps | Written &viva | F&S | III | |

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| CO1,CO6 | Describe Muscles connecting upper limb to the thoracic wall | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | III | |
| CO1,CO6 | Describe Muscles connecting upper limb to the vertebral column | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | III | |
| CO1,CO6 | Describe Muscles connecting scapula to the humerus | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | III | |
| CO1,CO5 | Describe Joints of Upper limb and associated applied aspect<br>-Shoulder<br>-Elbow<br>-Wrist<br>-Carpometacarpal<br>-Metacarpophalangeal<br>-Proximal-interphalangeal<br>-Distal-interphalangeal | Cognitive/ Comprehension | DK | Knows how | Lecture/Video | Written &viva | F&S | III | |

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| | joint | | | | | | | | |
| CO1,CO5 | Describe Axilla and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Video | Written &viva | F&S | III | |
| CO1,CO5 | Describe Cubital fossa and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Animation/Lecture | Written &viva | F&S | III | |
| CO1,CO5 | Describe Vessels of upper limb and associated applied aspect | Cognitive/ Comprehension | DK | Knows | Demonstration | Written &viva | F&S | III | |
| CO1,CO5 | Describe the upper arm and associated applied aspect -Contents of anterior fascial compartment -Contents of posterior fascial compartment | Cognitive/ Recall | MK | Knows | Lecture/ Discussion | Written &viva | F&S | III | |
| CO1,CO5 | Describe Bones of the Upper arm and associated applied aspect -Humerus | Cognitive/ Recall | MK | Knows | Departmental Seminar & Lecture | Written &viva | F&S | III | |

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| CO1,CO5 | Describe Forearm:<br>-Contents of the anterior fascial compartment<br>-Muscles: (origin, insertion, actions)<br>-Contents of the lateral fascial compartment<br>-Contents of the posterior fascial compartment | Cognitive/ Recall | MK | Knows | Demonstration | Written &viva | F&S | III | |
| CO1,CO5 | Describe Bones of the Forearm and associated applied aspect<br>-Radius<br>-Ulna | Cognitive/ Recall | MK | Knows | Lecture/ DIscussion | Written &viva | F&S | III | |
| CO1,CO5 | Describe Anatomical snuff box (boundaries, contents and clinical anatomy) | Cognitive/ Recall | MK | Knows | Demonstration | Written &viva | F&S | III | |

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| CO1,CO2 | Describe the palm and associated applied aspect | Cognitive/ Comprehension | DK | Knows how | Small group discussion | Written &viva | F&S | III | |
| CO1,CO2 | Describe dorsum of hand and associated applied aspect | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | III | |
| CO1,CO5 | Describe Bones of the hand and associated applied aspect -Carpals -Metacarpals -Phalanges | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | III | |
| CO1,CO2 | Explain Brachial Plexus and Major nerves of upper limb | Cognitive/ Comprehension | MK | Knows | Lecture/Video | Written &viva | F&S | III | |
| CO1,CO2 | Describe rotator cuff | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | III | |

**Table 3: Learning objectives of Tashreehul Badan UNIUG-TB Paper – II (Theory)**

| A3 Course | B3 Learning Objective | C3 Domain/Sub | D3 Must to | E3 Level Does/show | F3 T-L method | G3 Assessmen | H3 Formative | I3 Te | J3 Integration |
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| outcome | (At the end of the session, the Students should be able to) | | know/desirable to know/Nice to know | s/ Knows how/ Knows | | t | /summative | rm | |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1 - *Batn* (Abdomen)** (Lecture:- **40** hours, Non lecture **30** hrs) | | | | | | | | | |
| CO1 | Describe the Abdominal regions and enlist their contents | Cognitive/ Comprehension | MK | Knows how | Lecture/video | Written & viva | F & S | II | |
| CO1 CO2 | Describe the Anterior Abdominal wall and enumerate its surface landmarks | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 | Enlist and explain the layers of Anterior Abdominal Wall and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe muscles of anterior abdominal walland associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe External Oblique and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Describe Internal Obliqueand associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/ | Written & viva | F & S | II | |
| CO1 | Describe Transverses Abdominis and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe Rectus Abdominis and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Map | Written &viva | F & S | II | |
| CO1 | Describe rectus sheathand associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 | Describe Cremaster and Pyramidalis and associated applied aspect | Cognitive/ Comprehension | DK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Identify the arteries of the anterior abdominal walland associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Enlist deep nerves of the anterior abdominal walland associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |

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| CO1 | Define Fascia Transversalis and associated applied aspect | Cognitive/ Comprehension | DK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe the Inguinal region (groin)and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Explain the Inguinal canaland associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Maps | Written & viva | F & S | II | |
| CO1,CO 2 | Describe Peritoneum: Peritoneal pouches, recesses, spaces and gutters and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Project Based learning/Lecture | Written & viva | F & S | II | |
| CO1 | Identify and discuss the subdivisions of peritoneal cavity and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Discussion | Written &viva | F & S | II | |
| CO1 CO2 | Describe abdominal oesophagus and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Anatomy of | Cognitive/ Comprehensi | MK | Knows how | Departmental Seminar & Lecture | Written & viva | F & S | II | |

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| | Stomach and associated applied aspect | on | | | | | | | |
| CO1 | Describe duodenum, ileum and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Jejunum and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Gallbladder: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Liver and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 CO2 | Describe the anatomy of portal vein and its applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Extra hepatic biliary apparatus and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Discussion | Written &viva | F & S | II | |
| CO1 CO2 | Describe Pancreas and | Cognitive/ Comprehensi | MK | Knows how | Departmental Seminar & Lecture | Written & viva | F & S | II | |

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| | associated applied aspect | on | | | | | | | |
| CO1 | Describe Spleen: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe Caecum: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 CO2 | Describe Appendix: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F & S | II | |
| CO1 CO2 | Describe Ascending colon: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 CO2 | Describe Descending colon: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe the Superior and Inferior Mesenteric Vessels | Cognitive/ Comprehension | MK | Knows how | Lecture/Discussion | Written & viva | F & S | II | |
| CO1 | Describe Kidneys: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Departmental Seminar & Lecture | Written & viva | F & S | II | |

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| CO1 | Describe foramen of Winslow | Cognitive/ Comprehension | MK | Knows how | Lecture/Maps | Written & viva | F & S | II | |
| CO1 | Describe Coelic trunk | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |
| CO1 | Describe Cisterna chyli | Cognitive/ Comprehension | MK | Knows how | Lecture/Maps | Written & viva | F & S | II | |
| CO1 | Describe Ureter and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Demonstration | Written & viva | F & S | II | |
| CO1 | Describe Suprarenal glands: and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture/Discussion | Written &viva | F & S | II | |
| CO1 | Explain the Posterior Abdominal Wall and its structure | Cognitive/ Comprehension | DK | Knows how | Lecture/Demonstration | Written &viva | F & S | II | |
| CO1 | Describe the muscles of the Posterior Abdominal Wall | Cognitive/ Comprehension | MK | Knows how | Lecture/Demonstration | Written & viva | F & S | II | |
| CO1 | Name and explain the fasciae of posterior abdominal wall | Cognitive/ Comprehension | MK | Knows how | Lecture/Discussion | Written &viva | F & S | II | |
| CO1 | Explain abdominal aorta and associated applied aspect | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F & S | II | |

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| CO1 | Explain Inferior vena cava and associated applied aspect Portal vein | Cognitive/ Comprehension | DK | Knows how | Lecture/Demonstration | Written & viva | F & S | II | |
| CO1 | Label the lymphatics and lymph nodes of the Posterior abdominal wall | Cognitive/ Comprehension | MK | Knows how | Lecture/Demonstration | Written & viva | F & S | II | |
| CO1 | Explain Nerves on the posterior abdominal wall and associated applied aspect | Cognitive/ Comprehension | NK | Knows how | Lecture/Discussion | Written & viva | F & S | II | |
| CO1,CO 5 | Describe Lumbar vertebrae | Cognitive/ Comprehension | MK | Knows how | Departmental Seminar & Lecture | Written &viva | F&S | II | |
| **Topic 2- *A'ana wa ejan* (Pelvis and Perineum)** (Lecture:- **30** hours, Non lecture **15** hrs) | | | | | | | | | |
| CO1,CO 6 | Explain Bony pelvis<br>-Pelvic walls<br>-Pelvic diaphragm<br>-Bony landmarks | Cognitive/ Comprehension | MK | Knows | Demonstration & Lecture | Written &viva | F&S | III | Obstetrics |
| CO1,CO 5 | Describe Sacrum and coccyx: | Cognitive/ Comprehension | DK | Knows how | Demonstration & Lecture | Written & viva | F&S | III | |
| CO1,CO 5 | Describe Muscles of pelvic wall and floor | Cognitive/ Comprehension | MK | Knows how | Lecture | Written & viva | F&S | III | |
| CO1,CO 5 | Describe Muscles of | Cognitive/ Comprehensi | MK | Knows how | Lecture | Written & viva | F&S | III | |

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| | perineum | on | | | | | | | |
| CO1,CO 5 | Describe Contents of the pelvic cavity -Sigmoid colon -Rectum | Cognitive/ Comprehension | DK | Knows how | Lecture | Written & viva | F&S | III | |
| CO1,CO 5 | Describe Pelvic viscera: -Ureters -Urinary bladder -Urethra | Cognitive/ Recall | MK | Knows | Lecture | Written & viva | F&S | III | |
| CO1,CO 5 | Describe Male genital organs -Prostate -Testes -Penis -Seminal vesicles -Bulbourethral glands | Cognitive/ Recall | MK | Knows | Lecture | Written & viva | F&S | III | |
| CO1,CO 5 | Explain Female genital organs -Ovaries -Uterine tubes -Uterus -Vagina -Vulva -Mammary glands | Cognitive/ Recall | MK | Knows | Lecture | Written & viva | F&S | III | |
| CO1 | Describe The perineum -Anal triangle | Cognitive/ Comprehension | DK | Knows how | Small group discussion | Written & viva | F&S | III | |

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| | -Superficial perineal pouch<br>-Deep perineal pouch | | | | | | | | |
| CO1 | Describe Urogenital diaphragm | Cognitive/ Recall | MK | Knows | Small group discussion | Written &viva | F&S | III | |
| CO1,CO 2 | Describe Ischiorectal fossa | Cognitive/ Comprehensi on | MK | Knows how | Demonstration &Small group discussion | Written &viva | F&S | III | |
| CO1 | Explain Anal canal | Cognitive/ Comprehensi on | NK | Knows how | Lecture | Written &viva | F&S | III | |
| CO1 | Describe Urogenital triangle | Cognitive/ Comprehensi on | MK | Knows how | Lecture/Maps | Written &viva | F&S | III | |
| CO1 | Explain Joints of the pelvis | Cognitive/ Comprehensi on | MK | Knows how | Demonstration &Small group discussion | Written &viva | F&S | III | |
| CO1 | Describe Pelvic fascia, Pelvis and peritoneum | Cognitive/ Comprehensi on | MK | Knows how | Lecture/Maps | Written &viva | F&S | III | |
| CO1 | Describe Sex differentiation of pelvis | Cognitive/ Comprehensi on | MK | Knows how | Demonstration & Small group discussion | Written &viva | F&S | III | |
| CO1 | Describe Clinical Anatomy of Pelvis | Cognitive/ Comprehensi on | MK | Knows how | Discussion | Written &viva | F&S | III | |
| **Topic 3- *Tarfe Asfal* (Lower Limb)** (Lecture:- **30** hours, Non lecture **15** hrs) | | | | | | | | | |
| CO1,CO 6 | Describe Gluteal region<br>-Bones (Ilium, | Cognitive/ Comprehensi on | MK | Knows how | Departmental Seminar & Lecture | Written &viva | F&S | I | |

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| | Ischium and Pubis)<br>-Muscles (origin, insertion, nerve supply and actions)<br>-Nerves<br>-Arteries<br>-Applied aspect | | | | | | | | |
| CO1,CO 5 | Describe Joints of Lower limb and associated applied aspect<br>-Hip<br>-Knee<br>-Proximal and tibiofibular joint<br>-Ankle<br>-Tarsometatarsal<br>-Metatarsophalangeal<br>-Proximal-interphalangeal<br>-Distal-interphalangeal<br>-Subtalar | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1,CO 5 | Describe Anterior fascial (extensor) compartment of thigh<br><br>-Muscles (origin, insertion, nerve | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | I | |

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| | supply and actions) of Anterior fascial compartment | | | | | | | | |
| CO1,CO 5 | Describe Medial fascial (adductor) compartment of thigh: Muscles (origin, insertion, nerve supply and actions) | Cognitive/ Comprehension | DK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO 5 | Describe Posterior fascial (hamstring/ flexor) compartment of thigh: -Muscles (origin, insertion, nerve supply and actions): | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO 5 | Describe Bones of the leg -Femur -Tibia -Fibula | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO 5 | Describe bones of the foot -Tarsals -Meta-tarsals -Phalanges | Cognitive/ Recall | MK | Knows | Lecture | Written &viva | F&S | I | |

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| CO1, CO2 | Explainpopliteal fossa | Cognitive/ Comprehension | MK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1, CO2 | Describe fascial compartments of the leg<br>-Anterior (extensor)&muscles<br>-Lateral fascial (peroneal) compartment of leg&muscles<br>-Posterior fascial (flexor) compartment of leg&muscles | Cognitive/ Comprehension | DK | Knows how | Lecture | Written &viva | F&S | I | |
| CO1 | Describe Ankle region<br>-Anterior aspect of ankle<br>-Posterior aspect of ankle<br>Sole of the foot:<br><br>Muscles of the sole (origin, insertion, nerve supply and actions):<br><br>Dorsum of the foot | Cognitive/ Recall | MK | Knows how/ Knows | Small group discussion and lecture | Written &viva | F&S | I | |

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| CO1 | Describe sole and dorsum of the foot:<br>-Muscles of the sole (origin, insertion, nerve supply and actions): | Cognitive/ Recall | MK | Knows | Small group discussion and lecture | Written &viva | F&S | I | |
| CO1 | Explain Arches of the foot: | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1 | Explain Femoral &Adductor canal | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1 | Explain Femoral Triangle | Cognitive/ Comprehension | MK | Knows | Guest Lecture | Written &viva | F&S | I | |
| CO1,CO 2 | Explain Lumbar Plexus and Major nerves of Lower limb | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO 2 | Explain Sacral Plexus | Cognitive/ Comprehension | MK | Knows | Lecture | Written &viva | F&S | I | |
| CO1,CO 2 | Demonstrate movements of foot | Psychomotor | DK | Knows | Demonstration | Written &viva | F&S | I | |

**Table 4: Learning objectives of Tashreehul Badan UNIUG-TB (Practical)**

| A4 Course outcome | B4 Learning Objective (At the end of the Practical/ Clinic, the Students should be able to) | C4 Domain/Sub | D4 Must to know/desirable to know/Nice to know | E4 Level Does/ shows/ Knows how/ Knows | F4 T-L method | G4 Assessment | H4 Formative /summative | I4 Term | J4 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Practical 1 -Anatomy Law, Prosections and Dissections** (Non Lecture - **60** hours) | | | | | | | | | |
| CO1 | Describe Anatomy Law, Preservation of Cadaver, Body parts and Specimen. | Cognitive/Recall | MK | Knows how | Tutorial+ Demonstration+ Video clips | Written & Viva-Voce | F & S | I | |
| CO1 CO2 CO3 | Describe Line of dissection Dissection technique | Cognitive/Recall | MK | Knows how | Tutorial+ Demonstration+ Video clips | Written & Viva-Voce | F & S | I | |
| CO1 CO2 CO3 | Identify different layers of body | Psychomotor | MK | Knows how | Tutorial+ Demonstration+ Video clips | Written & Viva-Voce | F & S | III | |

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| CO1<br>CO2<br>CO3 | Perform Dissections of the parts of the body (Cadaver, Audio<br>-Visual aids or other techniques available e.g., CD's, Software or other advanced technology | Psychomotor | MK | Knows how | Tutorial+<br>Demonstration+ Video clips | Written & Viva-Voce | F & S | I,II, III | |
| CO1<br>CO2<br>CO3 | Observe Prosection of the parts of the body | Psychomotor | MK | Knows how | Tutorial+<br>Demonstration+ Video clips | Written & Viva-Voce | F & S | I,II, III | |
| **Practical II - Osteology and Arthrology** (Non Lecture- **100** hours) | | | | | | | | | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Describe Bones and Joints of Neurocranium | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | I | |
| | | Cognitive/ | MK | Knows | Tutorial+ | Spotting & | F & S | I | |

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| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Describe Bones and Joints of Viscerocranium | Comprehension | | how | Demonstration | Viva-Voce | | | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Enumerate Bones and Joints of Thoracic | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | II | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Describe Bones and Joints of Upper limb | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | III | |
| CO1<br>CO5<br>CO3<br>CO5 | Enlist Bones and Joints of Pelvis | Cognitive/Recall | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | III | |

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| CO6<br>CO7 | | | | | | | | | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Describe Bones and Joints of Lower limb | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | I | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Describe Associated Radiological Anatomy of all regions | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | III | |
| CO1<br>CO5<br>CO3<br>CO5<br>CO6<br>CO7 | Explain Vertebral column and associated Joints (General characteristics of Vertebral column and all vertebra individually) | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | III | |
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| **Practical III - Practical study of viscera** (Non Lecture- **100** hours) | | | | | | | | | |
| CO1<br>CO2 | Describe Brain & Spinal cord with the help of models, charts and specimens. | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | I | |
| CO1<br>CO2 | Describe Viscera and glands of neck with the help of models, charts and specimens. | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | II | |
| CO1<br>CO2 | Describe Lungs, Heart and all viscera of thorax with the help of models, charts and specimens. | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | II | |
| CO1<br>CO2 | Describe Liver, spleen, stomach, kidney and all other Abdominal viscera with the help of models, charts and | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Spotting & Viva-Voce | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| | specimens. | | | | | | | | |
| CO1<br>CO2 | Describe all Pelvic Viscera with the help of models, charts and specimens.<br><br>Fossae and structures of Upper and lower Limb<br>Cubital Fossa<br>Popliteal fossa | Cognitive/<br>Comprehension | MK | Knows how | Tutorial+<br>Demonstration | Spotting & Viva-Voce | F & S | III | |
| CO1<br>CO2 | Describe Cubital Fossa and structures of Upper limb with the help of models, charts and specimens. | Cognitive/<br>Comprehension | MK | Knows how | Tutorial+<br>Demonstration | Spotting & Viva-Voce | F & S | III | |
| CO1<br>CO2 | Describe Popliteal fossa and structures of Lower limb with the help of models, charts | Cognitive/<br>Comprehension | MK | Knows how | Tutorial+<br>Demonstration | Spotting & Viva-Voce | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | and specimens. | | | | | | | | |
| **Practical IV - Study of Anatomy on living subject (Patient)** (Non Lecture- **20** hours) | | | | | | | | | |
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Describe and Identify Pulsations | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Viva-Voce | S | III | |
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Describe Counting of Ribs | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Viva-Voce | S | III | |
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Describe Heart sounds | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Viva-Voce | S | III | |
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Identify of different bony landmarks | Psychomotor | MK | Knows how | Tutorial+ Demonstration | Viva-Voce | S | III | |
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Explain Deep tendon reflexes<br>-Biceps<br>-Brachioradialis<br>-Triceps<br>-Patellar<br>-Ankle | Cognitive/ Comprehension | MK | Knows how | Tutorial+ Demonstration | Viva-Voce | S | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO1<br>CO2<br>CO4<br>CO5<br>CO7 | Explain Superficial reflexes<br>-Plantar response<br>-Abdominal reflex - Cremastic reflex<br>-Corneal reflex | Psychomotor | MK | Shows | Tutorial+<br>Demonstration | Viva-Voce | S | III | |

**Table 5- Non Lecture Activities of Tashreehul Badan UNIUG-TB**

| | S. No | List non lecture Teaching-Learning methods | No of Activities |
|---|---|---|---|
| A | | Activities in classroom | |
| | 1 | Demonstration | 20 |
| | 2 | Discussion | 20 |
| | 3 | Departmental Seminar | 10 |
| | 4 | Small group discussion | 13 |
| | 5 | Guest Lecture | 2 |
| | 6 | Concept Maps | 15 |
| | 7 | Educational Videos | 20 |
| | 8 | Project based learning | 03 |
| | 9 | Early clinical Exposure | 02 |
| | 10 | Animation | 15 |
| | | Subtotal - 120 | |
| B | | Activities in practical | 280 |
| | **Total** | | **400** |

## Table 6: Assessment Summary

## 6 A - Number of papers and Marks Distribution

| S.No. | Subject | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Practical or Clinical | Viva | Electives | IA | Total | |
| 1 | Tashreehul Badan (Human Anatomy) Paper – I Paper - II | 2 | 200 | 100 | 20 | 10 | 20 | 150 | 350 |

## 6. B - Scheme of Assessment (formative and Summative)

| SR.NO. | PROFESSIONAL COURSE | DURATION OF PROFESSIONAL COURSE | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First | 3 PA & First TT | 3 PA & Second TT | 3 PA & UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

## 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 | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 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. | Other activities explained in Table 3 Column G3 as per indicated term. |

## 6 E - Question Paper Pattern

**I PROFESSIONAL BUMS EXAMINATIONS**

**UNIUG-TB**

**PAPER-I**

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 |

**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(1) - Distribution of Theory examination Paper-I

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ<br>(1 Mark) | SAQ<br>(5 Marks) | LAQ<br>(10 Marks) |
| 1 | (Tashreeh ul Badan ka تشریح البدن کا تعارف ta'aruf)<br>**Introduction of Human Anatomy (General Anatomy)** | I | 10 | Yes | Yes | No |
| | **(j) *Nizame Jismani ka mukhtasar ta' aruf***<br>نظام جسمانی کا مختصر تعارف<br>A brief description of systems of the Body) | | | | | |
| | **(k) *Tashreehi waz'a wa Muta'alliqa istilahat*** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | تشریحی وضع ومتعلقہ اصطلاحات<br>(Anatomical position and related terminologies) | | | | | |
| | **(l) *Jild aur uske zawaid***<br>***جلد اور اسکے زوائد***<br>(Skin and its appendages) | | | | | |
| | **(m) *Lafaife satahiya wa ghaairah***<br>**لفائف سطحیہ و غائرہ**<br>(Superficial and deep Fasciae) | | | | | |
| | **(n) *Autar, Rabatat aur Akyase zulaliya***<br>***اوتار رباطات اور اکیاس زلالیہ***<br>(Tendon, Ligaments and Bursae) | | | | | |
| | **(o) *Izaam: Aqsaam, af'aal wa ta'azzum***<br>***عظام،اقسام، افعال وتعظم***<br>Bones: (Types, functions and ossification) | | | | | |
| | **(p) *Azlaat: Aqsaam wa af'aal***<br>***عضلات، اقسام و افعال***<br>Muscles(Types and functions) | | | | | |
| | **(q) *Mafasil, Aqsaam wa harakaat***<br>***مفاصل، اقسام و حرکات***<br>(Joints, Types and movements) | | | | | |
| | **(r) *Ilmul janeen wa nasliyat***<br>***علم الجنین و نسلیات***<br>(General Embryology and Genetics) | | | | | |
| 2 | ***Raas* راس**<br>**(Head )** | I | 20 | Yes | Yes | Yes |
| | **(i) *Jumjumah aur uske manaazir ka aam bayaan***<br>***جمجمہ اور اسکےمناظر کا بیان***<br>(General description and views of Skull). | | | | | |
| | **(j) *Mufsal Sudughi fakki***<br>***مفصل صدغی فکی***<br>(Temporomandibular joint) | | | | | |
| | **(k) *Jaufe Fam, Lisaan, Asnaan wa Halaq***<br>***جوف فم، لسان، اسنان و حلق***<br>(Oral Cavity, Gums, Teeth and Pharynx) | | | | | |
| | **(l) *Anaf, Jaufe Anf wa Khalaye Hawaiyah***<br>***انف،جوف انف وخلایا ہوائیہ***<br>(Nose, nasal cavity and Paranasal sinuses) | | | | | |
| | **(m) *Uzn* اذن**<br>(Ear) | | | | | |
| | **(n) *Mashmoolate Mahjar***<br>***مشمولات محجر***<br>(Contents of Orbit): ***Aj'faan* اجفان** (Eyelids) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **(o)** ***Aalate dam'a*** ***آلات دمع*** (Lacrimal apparatus) and ***Muqlatul Ain*** ***مقلۃ العین*** (Eye ball) | | | | | |
| | **(p)** ***Ghudade Lu'abiya*** ***غدد لعابیہ*** (Salivary glands) | | | | | |
| 3 | ***Unq*** ***عنق*** **(Neck)** | II | 10 | Yes | Yes | No |
| | **(i)** ***Musallasate Unq ka mukhtasar bayaan*** ***مثلثات عنق کا مختصر بیان*** (Brief description of Triangles of the Neck) | | | | | |
| | **(j)** ***Azlaate Unq*** ***عضلات عنق*** (Muscles of the Neck) | | | | | |
| | **(k)** ***Urooq wa a'asab*** ***عروق و اعصاب*** (Vessels and nerves) | | | | | |
| | **(l)** ***Hanjarah wa Qasbatu r'riyah*** ***حنجرہ و قصبۃ الریہ*** (Larynx and Trachea) | | | | | |
| | **(m)** ***Mari*** ***مری*** (Oesophagus) | | | | | |
| | **(n)** ***Raas wa Unq ke Ghudade Lymphawiyah*** ***راس و عنق کے غدد لمفاویہ*** (Lymph nodes of Head and neck) | | | | | |
| | **(o)** ***Fuqrate Unq*** ***فقرات عنق*** (Cervical Vertebrae) | | | | | |
| | **(p)** ***Ghudade Darqiyah wa Jaar darqiyah*** ***غدد درقیہ وجار درقیہ*** (Thyroid and parathyroid glands) | | | | | |
| 4 | ***NizameA'asab*** ***نظام اعصاب*** **(Nervous system)** | II | 10 | Yes | Yes | No |
| | **(c)** ***Aghshiya-e-Dimagh, Dimagh aur Nukha'a ka mukhtasar bayaan*** ***اغشیہ دماغ، دماغ اور نخاع کا مختصر بیان*** (A brief description of Meanings, Brain and spinal cord) | | | | | |
| | **(d)** ***A'asabe Nukha wa Dimaghi*** ***اعصاب نخاع و دماغی*** (Cranial and Spinal nerves) | | | | | |
| 5 | ***Sadr*** ***صدر*** **(Thorax)** | II | 30 | Yes | Yes | Yes |
| | **(j)** ***Jaufe Sadr*** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ***جوف صدر***<br>(Thoracic Cavity) | | | | | |
| | **(k)** ***Azla'a, Azmul Qas wa fuqraate sadr***<br>اضلاع عظم القص و فقرات صدر<br>(Ribs, Sternum and Thoracic Vertebrae) | | | | | |
| | **(l)** ***Azlaate sadr***<br>***عضلات صدر***<br>(Muscles of the Thorax) | | | | | |
| | **(m)** ***Ghishaur riyah wa riyatain***<br>غشاءالریہ و ریتین<br>(Pleura and Lungs) | | | | | |
| | (n) ***Hijabe munassifussadr wa mashmoolat***<br>**حجاب منصف الصدر و مشمولات**<br>(Mediastinum & its contents) | | | | | |
| | **(o)** ***Urooq wa A'asab aur majrae sadr***<br>***عروق و اعصاب اورمجری صدر***<br>(Vessels, Nerves and Thoracic duct) | | | | | |
| | **(p)** ***Ghilaful qalb wa Qalb***<br>***غلاف القلب و قلب***<br>(Pericardium and Heart) | | | | | |
| | **(q)** ***Hijabe Hajiz***<br>***حجاب حاجز***<br>(Diaphragm) | | | | | |
| | **(r)** ***Saddyain***<br>ثد یئین<br>(Mammary Gland) | | | | | |
| 6 | ***Tarfe A'ala***<br>***طرف اعلیٰ***<br>**(Upper Limb)** | III | 20 | Yes | Yes | Yes |
| | **(f)** ***Izam***<br>***عظام***<br>(Bones) | | | | | |
| | **(g)** ***Azlaat***<br>***عضلات***<br>(Muscles) | | | | | |
| | **(h)** ***Mafasil***<br>***مفاصل***<br>(Joints) | | | | | |
| | **(i)** ***Ibt wa hufrae mirfaqiyah***<br>ابط و حفرہ مرفقیہ<br>(Axilla and Cubital fossa) | | | | | |
| | **(j)** ***Urooq wa A'asab***<br>***عروق و اعصاب***<br>(Vessels and nerves) | | | | | |

# 6 F(2) - Distribution of Theory examination Paper-II

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ (1 Mark) | SAQ (5 Marks) | LAQ (10 Marks) |
| 1 | (Batan) بطن<br>(Abdomen) | II | 40 | Yes | Yes | Yes |
| | a. اقسام بطن(Aqsam-e-Baṭan)<br>(Abdominal regions) | | | | | |
| | b. مقدم دیوار بطن<br>(Muqaddam Deewar-e-Baṭan)<br>(Anterior Abdominal wall) | | | | | |
| | c. عضلہ مورب ظاہرہ اور مورب غائرہ( External Oblique and<br>Internal Oblique muscle) | | | | | |
| | d. عضلہ مستعرضہ بطنیہ و مستقیمہ بطنیہ( Transversus<br>Abdominis and Rectus Abdominis<br>(muscle | | | | | |
| | e. لفافہ مستقیمہ(Rectus sheath) | | | | | |
| | f. عضلہ معلقۃ الخصیہ و مخروطیہ ( Cremaster and<br>Pyramidalis muscle | | | | | |
| | g. دیوار بطن کے اعصاب و عروق (Arteries and nerves of<br>the anterior abdominal wall) | | | | | |
| | h. لفافہ مستعرضہ(Fascia Transversalis) | | | | | |
| | i. خطہ اربیہ و قنات اربیہ ( Inguinal region<br>(groin) and Inguinal canal | | | | | |
| | j. باریطون، ثرب، ماساریقا( Peritoneum, Omentum<br>(and Mesentry | | | | | |
| | k. رباطات باریطون (Ligaments of peritoneum) | | | | | |
| | l. مری کا بطنی حصہ اور اطلاقی تشریح<br>Abdominal part of the Oesophagus and<br>its applied anatomy | | | | | |
| | m. معدہ اور اطلاقی تشریح Stomach and its applied<br>anatomy | | | | | |
| | n. اثناعشری اور اطلاقی تشریح (Duodenum and its | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | applied anatomy ) | | | | | |
| | o. معاءصائم اور اطلاقی تشریح ( Jejunum along with its applied anatomy | | | | | |
| | p. معاءلفائفی اور اطلاقی تشریح( Ileum along with its applied anatomy | | | | | |
| | q. کبداور اطلاقی تشریح (Liver and its applied anatomy) | | | | | |
| | r. وریدباب الکبداور اطلاقی تشریح (Portal vein and its applied anatomy ) | | | | | |
| | s. آلات صفراویہ کبدی خارجی Extrahepatic Biliary Apparatus along with its applied anatomy | | | | | |
| | t. بانقراس اور اطلاقی تشریح Pancreas and its applied anatomy | | | | | |
| | u. طحال اور اطلاقی تشریح Spleen and its applied anatomy | | | | | |
| | v. اعور اور اطلاقی تشریح Caecum and its applied anatomy | | | | | |
| | w. زائدہ دودیہ اور اطلاقی تشریح Appendix and its applied anatomy | | | | | |
| | x. قولون اور اطلاقی تشریح Colon and its applied anatomy | | | | | |
| | y. وریدماساریقاعلیٰ واسفل Superior and Inferior Mesenteric Vessels | | | | | |
| | z. کلیتین اور اطلاقی تشریح Kidneys and its applied anatomy | | | | | |
| | aa. اعضاءزنانہ ومردانہ خارجی اور اطلاقی تشریح External male and female genital organs and its applied anatomy | | | | | |
| | bb. غدہ فوق الکلیہ اور اطلاقی تشریح Suprarenal Glands & its applied anatomy | | | | | |
| | cc. دیوار بطن مؤخر(Posterior Abdominal Wall) | | | | | |
| | dd. اوردہ بطنی(Abdominal Aorta) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (Inferior Vena Cava)اجوف اسفل .ee | | | | | |
| 2 | **(*A'ana wa ejan*) *عانہ و عجان***<br>**(Pelvis and perineum)** | III | 30 | Yes | Yes | Yes |
| | **(e) *Hauz e A'anaa aur Ejan***<br>***حوض عانہ اور عجان***<br>(Pelvis, perineum and Ischiorectal fossa) | | | | | |
| | **(f) *Azmul ajuz wa- us'us***<br>***عظم العجز و عصعص***<br>(Sacrum and coccyx) | | | | | |
| | **(g) *Azlaate a'ana***<br>***عضلات عانہ***<br>(Muscles and joints of pelvis) | | | | | |
| | **(h) *Ah'shae Aana***<br>احشاء عانہ<br>(Pelvic viscera and External Male/Female sex organs) | | | | | |
| 3 | ***Tarfe Asfal* طرف اسفل**<br>**(Lower Limb)** | I | 30 | Yes | Yes | Yes |
| | **(i) *Izaam***<br>***عظام***<br>(Bones) | | | | | |
| | **(j) *Azlaat***<br>***عضلات***<br>(Muscles) | | | | | |
| | **(k) *Mafasil***<br>***مفاصل***<br>(Joints) | | | | | |
| | **(l) *Urooq wa A'asab***<br>***عروق و اعصاب***<br>(Vessels and nerves) | | | | | |
| | **(m) *Hufrajat***<br>***حفراجات***<br>(Fossae) | | | | | |
| | **(n) *Musallase Fakhzi***<br>مثلث فخذی<br>(Femoral triangle) | | | | | |
| | **(o) *Qanate Muqarribah***<br>***قنات مقربہ***<br>(Adductor canal) | | | | | |
| | **(p) *Hufrae mabiziyah***<br>حفرہ مابضیہ<br>(Popliteal fossa) | | | | | |

# 6 G(1) - Question Paper blueprint Paper-I

| A<br>Question<br>Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. 1(a) / 1(i) / 3(a)<br>2. 1(b) / 2(b)<br>3. 1(c) / 2(c)<br>4. 1(d)/ 2(d)<br>5. 1(e) / 2(e)<br>6. 1(f) / 2(f)<br>7. 1(g) / 2(g)<br>8. 1(h)/ 2(h)<br>9. 2(a) / 5(a)<br>10. 5(b) / 5(c)<br>11. 5(d) / 5(g)<br>12. 6(a)/6(b)<br>13. 6(c) /6(e)<br>14. 4(a) /3(h)<br>15. 4(b) /3(g)<br>16. 5(e) /3(f)<br>17. 5(f) /3(e)<br>18. 5(h) /3(d)<br>19. 5(i)/3(c)<br>20. 6(d) /3(b) |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. 1(a) / 1(i) / 3(a) / 4(a)<br>2. 1(b) / 2(b) / 3(b) / 4(b)<br>3. 1(c) / 2(c) / 3(c) / 5(e)<br>4. 1(d)/ 2(d) / 3(d) / 5(f)<br>5. 1(e) / 2(e) / 3(e) / 5(h)<br>6. 1(f) / 2(f) / 3(f) / 5(i)<br>7. 1(g) / 2(g) / 3(g) / 6(d)<br>8. 1(h)/ 2(h) / 3(h) / 6(e) |

| | | |
|---|---|---|
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. 2(a) / 5(c) / 6(c)<br>2. 5(a) / 5(d)<br>3. 5(b) / 5(g)<br>4. 6(a)/ 6(b) |

## 6 G(2) - Question Paper blueprint Paper-II

| A<br>Question Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. 1(ff) / 1(vv) / 1(ddd)<br>2. 2(a) / 1(xx) / 1(fff)<br>3. 2(b) / 1(yy) / 1(ggg)<br>4. 2(c)/ 1(zz) / 1(hhh)<br>5. 2(d) / 1(eee)<br>6. 3(a) / 1(hh)<br>7. 3(b) / 1(ii)<br>8. 3(c)/ 1(kk)<br>9. 3(d) / 1(ll)<br>10. 3(e) / 1(mm)<br>11. 3(f) / 1(pp)<br>12. 3(g) / 1(jjj)<br>13. 3(h) / 1(iii)<br>14. 1(gg) / 1(qq)<br>15. 1(jj) / 1(rr)<br>16. 1(nn)/ 1(tt)<br>17. 1(oo) / 1(ww)<br>18. 1(rr) / 1(aaa)<br>19. 1(ss)/ 1(bbb)<br>20. 1(uu)/ 1(ccc) |
| Q2 | **Short answer Questions (SAQ)** | 1. 1(hh) / 1(ii) / 1(ggg) |

| | | |
|---|---|---|
| | Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 2. 2(c) / 1(kk) / 1(hhh)<br>3. 3(b) / 1(ll) / 1(ww)<br>4. 3(d)/ 1(mm) / 1(aaa)<br>5. 3(e) / 1(pp) / 1(bbb) / 1(iii)<br>6. 3(f) / 1(qq) / 1(ccc) / 1(jjj)<br>7. 3(g) / 1(rr) / 1(ddd)<br>8. 3(h)/ 1(tt) / 1(fff) |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. 1(ff) / 1(jj) / 1(oo) / 1(uu)/1(zz)<br>2. 2(a) / 2(b) / 2(d) / 1(vv)/1(eee)<br>3. 3(a) / 3(c) / 1(rr) / 1(xx)<br>4. 1(gg)/ 1(nn) / 1(ss) / 1(yy) |

## 6 H - Distribution of Practical Examination

| SN | Heads | Marks |
|---|---|---|
| 1 | Practical (Total Marks 100) | |
| | Spotting: (1) Bone | 40 |
| | (2) Specimen | 20 |
| | (3) Model | 20 |
| | (4) X-Ray | 10 |
| | Record Book | 10 |
| **2** | Viva Voce | 20 |
| **3** | Internal | 20 |
| **4** | Electives | 10 |
| | **Total Marks** | **150** |

## Table 7. Reference Books/Resources:

| S.No. | Name of Book | Name of Author |
|---|---|---|
| 1 | تشریح عظام<br>(Tashreeh e izam)<br>Osteology | عبیداللہ<br>Ubaidullah |
| 2 | تشریح وضعی و اطلاقی راس و عنق<br>Anatomy<br>Regional and Applied<br>Head and Neck | عبیداللہ<br>Ubaidullah |
| 3 | تشریح وضعی و اطلاقی طرف اعلی<br>Anatomy<br>Regional and Applied<br>Upper Limb | عبیداللہ<br>Ubaidullah |
| 4 | تشریح وضعی و اطلاقی طرف اسفل<br>Anatomy<br>Regional and Applied<br>Lower Limb | عبیداللہ اور محمد آصف<br>Ubaidullah & Mohd Asif |
| 5 | تشریح وضعی و اطلاقی صدر<br>Anatomy<br>Regional and Applied<br>Thorax | عبیداللہ اور مغیث احمد انصاری Ubaidullah &<br>Moghees A. Ansari |
| 6 | General Anatomy<br>(First Edition) | Abu Kashif Anwar<br>ابو کاشف انور |
| 7 | القانون فی الطب<br>Al-Qanoon fit Tib (Jild Awwal) | ابن سینا<br>Ibn Sina |
| 8 | اشرا<br>Ishra | سید کمال الدین حسین ہمدانی<br>Kamaluddin Husain Hamdani |
| 9 | تشریح صغیر<br>TashreehSagheer | محمد کبیر الدین<br>Mohd Kabeeruddin |
| 10 | تشریح کبیر<br>Tashreeh kabeer | محمد کبیر الدین<br>Mohd Kabeeruddin |
| 11 | تشریح تصاویر<br>Tashreeh Tasaweer | محمد کبیر الدین<br>Mohd Kabeeruddin |

| | | |
|---|---|---|
| 12 | تشریح انسانی<br>Tashreeh e Insani | بیلی رام<br>Beliram LMS |
| 13 | تشریح ہیکل<br>Tashreeh e haikal | سید کمال الدین حسین ہمدانی<br>Kamaluddin Husain Hamdani |
| 14 | تشریح الاحشاء<br>Tashreehul Ahsha | سید کمال الدین حسین ہمدانی<br>Kamaluddin Husain Hamdani |
| 15 | Tashreeh Ahsha تشریح احشاء | محمد احمد لاری<br>M A Lari |
| 16 | تشریح المفاصل<br>Tashreehul Mafasil | محمد احمد لاری<br>M A Lari |
| 17 | تشریح سطحی<br>Tashreeh Sathi | انیس احمد انصا ری<br>Anis Ahmad Ansari |
| 18 | تشریح البدن<br>Tashreehul Badan | ہارون منصوری<br>Haroon Mansoori |
| 19 | تشر یح العظام<br>Tashreehul Izam | شبیر احمد<br>Shabbir Ahmad |
| 20 | تشریح العضلات<br>Tashreehul Azalat | شبیر احمد<br>Shabbir Ahmad |
| 21 | Human Anatomy – Regional and Applied Part I, II, III | B D Chourasia |
| 22 | General Anatomy | B D Chourasia |
| 23 | Gray's Anatomy 42th edition | Henry Gray |
| 24 | Clinical oriented Anatomy 4th edition | K.L. Koore |
| 25 | Fundamentals of Human Anatomy | N. Chakraborty and D. Chakraborty |
| 26 | Surface and Radiological Anatomy | A. Halim |
| 27 | Tartora's Principles of Anatomy & Physiology | Gerard J Tortora |
| 28 | Anatomy 8th edition | Samar Mitra |
| 29 | Snell's clinical Anatomy | Dr. Lawrence E. Weneski |
| 30 | Fundamentals of Nervous System | A K Anwar |

3

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS

## (PRESCRIBED BY NCISM)

## MANAFEUL AZA
## SUBJECT CODE: UNIUG-MZ
## HUMAN PHYSIOLOGY

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

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

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UNIUG-MZ

| | | |
|---|---|---|
| | Ikhraj) | |
| 11 | Manafeul Aza | Ansari Mohd Yusuf |
| 12 | Manafeul Aza | Javed Ahmad Lari |
| 13 | Manafeul Aza | Anwaar Ahmad Qureshi |

Course curriculum page no. 1 to 104 is approved

20/6/2023

20/6/2023

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SCAN ME

UNIUG-MZ

**NCISM**

**I professional BUMS**

Subject Code: **UNIUG-MZ**

# Manafeul Aza

## KEY POINTS

| **Total number of Teaching hours: 600** | | | |
|---|---|---|---|
| **Lecture hours (LH) - Theory** | | **200 Hours** | **200 Hours (LH)** |
| Paper I | 97 Hours | | |
| Paper II | 103 Hours | | |
| **Non-Lecture hours (NLH) – Theory** | | **120 Hours** | **400 Hours (NLH)** |
| Paper I | 58 Hours | | |
| Paper II | 62 Hours | | |
| **Non-Lecture hours (NLH) - Practical** | | **280 Hours** | |

| **Examination (Papers & Mark Distribution)** | | | | | |
|---|---|---|---|---|---|
| **Item** | **Theory Component Marks** | **Practical Component Marks** | | | |
| | | **Practical** | **Viva** | **Elective** | **IA** |
| **Paper I** | **100** | **100** | **20** | **10** | **20** |
| **Paper II** | **100** | | | | |
| **Sub-Total** | **200** | **150** | | | |
| **Total marks** | **350** | | | | |

# Preface

In Unani Medicine, seven factors called Umoore Tabiya, are considered essentials for the existence of human beings. Among these factors Afa'al (functions) of the body are placed at the seventh and last position indicating the functions of the body as the pinnacle of the biological existence of human beings. In the subject Manafeul Aza we study the functions of human body, from the point of view of both Unani and modern understanding. Knowing how the body works at the cellular level, organ level and as a whole? including the physical and chemical processes involved is the main domain of Manafeul Aza. Study of Manafeul Aza also includes the understanding of how body maintains a constant state of its internal environment (homeostasis) and how different organ systems play a role to maintain it. Knowing how an interchange between static and dynamic conditions take place and how after a brief change body gets back to a new steady state is a key area of Manafeul Aza. Another area of Manafeul Aza is the study of various control system of the body and how they regulate various functions. In this subject the students will study various topics like Homeostasis, Action Potential, Membrane transport, Muscle physiology and acid base balance. Various body systems which students will study are Haemopoietic system, Cardiovascular system, Digestive system, Respiratory system, Nervous system, Excretory system and endocrine system.

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**First BUMS**

**Course code and Names of Course**

| | **Course code** | **Name of Course** |
|---|---|---|
| | UNIUG-MZ | Manafeul Aza (Human Physiology) |
| | | |

**Table 1- Course outcomes and matched Program outcomes.**

| **SR1 CO No** | **A1 Course Outcome (CO) UNIUG-MZ At the end of the course UNIUG-MZ, the student should be able to-** | **B1 Course Outcome matched with program outcomes.** |
|---|---|---|
| **1** | Define *Al-istitbab* (homeostasis) and *Tabiat* and explain how homeostatic mechanisms normally maintain a constant interior milieu at organ, tissue and cellular level including the chemical and physical processes involved | **PO1, PO2** |
| **2** | State the *Nizame Aaza* (organ system of the body), explain the mechanisms by which each *Uzu works*, and relate the functions and the *Tashreeh (anatomy)* and *Nusujiyyat (histology)* of each organ system. | **PO1, PO2** |
| **3** | Understand and demonstrate the interrelations of the *Nizam-e –Aza* to each other. | **PO1, PO2** |
| **4** | Predict and explain the integrated responses of the organ systems of the body to *Tabayi ijahad (physiological stress)* and *Ghairtabayi ijhad* (pathological stresses). | **PO2** |
| **5** | Explain the *Mahiyatul marzi* (patho-physiology) of common diseases related to the organ systems of the body. | **PO2** |
| **6** | Measure and compare normal and abnormal values for a variety of *Wasait-e-tabayi (physiological parameter)* obtained through experiments | **PO1, PO2, PO4** |
| **7** | Utilize Data from experimental studies to explain the *Tabyi Usool* of body systems | **PO1, PO2, PO8** |
| **8** | Use *Manafeul Azayi istilahat (*physiological terminology) to comprehend and communicate information on body function (lab Reports) | **PO2, PO5** |
| **9** | Conduct experiments which illustrate chemical and physical concepts including *Paimaish zaqtud dam qavi (*blood pressure measurement), *Paimaish ahjam-e-aljihaz altanafusi* (measurement of respiratory volumes), *Tajziya-e- baul (urine analysis)*, and *Tajziya-e-dam (Blood examination)*. | **PO2, PO4** |

## Table 2: Contents of Manafeul Aza - Paper – I (Theory)

| | A2<br>List of Topics UNIUG-MZ | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| 1 | ***Umoomi Manafeul Aza*** **( General physiology)** | I | 10 | 9 | 05 |
| | (a) Al-istitbab (Homeostasis)الاستتباب | | | | |
| | (b) Transport across cell membrane انتقال بین الغشاءالخلیہ | | | | |
| | (c) Action potential جہدالفعل | | | | |
| | (d) Muscle physiology فعلیات الاعضاء | | | | |
| | (e) Macromolecules جزئی کبیروی سالمات کبیرہ | | | | |
| | (f) Protein synthesis پیدائش لحمین | | | | |
| | (g) Acid-base balance التوازن الحمضي القلوي | | | | |
| | (h) Water balance التوازن الماء | | | | |
| 2 | **Study of *Khulia* and *Insaja* (Cytology and Histology)** | I | 15 | 9 | 06 |
| | (a) Qhulia ki khurd beeni sakht-o-Afaal, (Brief discussion and introduction of cytology) خلیہ کی خورد بینی ساخت و افعال | | | | |
| | (b) Tareef –e- insaja (definition) تعریف انسجہ | | | | |
| | (c) Aqsaam –e- insaja (types)اقسام انسجہ | | | | |
| | (d) Insaja ki Khurd beeni sakht ka phailao-wa-afaal, (distribution and function of tissues), انسجہ کی خورد بینی ساخت کا پھیلاؤ و افعال | | | | |
| | (e) Nassej-e-bushra (epithelial tissue) نسیج بشریٰ | | | | |
| | (f) Naseej-e-waasil (connective tissue), نسیج واصل | | | | |
| | (g) Nassj-e-azlee (muscular tissue نسیج عضلی | | | | |
| | (h) Naseeje asabi (nervous tissue). نسیج عصبی | | | | |
| 3 | ***Khoon wa Nizam-e-Damwi*** **(Blood & Haemopoietic System)**خون و نظام دموی | II | 30 | 30 | 15 |
| | (a) Khoon ki tareef (definition of blood), Ajza (constituents), Afaal (functions), Lazoojat aur hajam (viscosity and volume). خونکی تعریف،اجزاء، افعال، لزوجت اور حجم | | | | |
| | (b) Maiyat-ud-dum (blood plasma): Ajza (constituents), Mavaad-e-lahmiya, aur afaal (plasma proteins and their functions) مائیت الدم ،اجزاء، مواد لحمیہ اور انکے افعال | | | | |
| | (c) Kurriyat-e-hamra (RBC): Saqht, ajza-e-tarkeebi (structure, composition), Paidaish (formation), Numu (development), aur Anjam (fate), Majmooyee taadaat (total count), Miqdaar ki | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | takhmeen ke tareeqe (methods of estimation), Aur unke feliyati iqhtilaaf (& their physiological variations) ، کریات حمراء : ساخت،اجزائے ترکیبی، پیدائش نمو اور انجام ،مجموعی تعداد،مقدار کی تخمین کے طریقے اور انکے فعلیاتی اختلاف | | | | |
| | (d) Hamratuddam (haemoglobin) ke Ajza-e-tarkeebee (composition), Aqsaam (varieties), Khwaas (properties),Miqhdaar ki takhmeen ke tareeqe (method of estimation), Aur afaal (and functions ، حمرۃالدم کے اجزائے ترکیبی،اقسام، خواص مقدار کی تخمین کے طریقے اور افعال. | | | | |
| | (e) Kurriyat-e-baiza (WBC) ki Saqht(structure), Aqsaam(types), Paidaish(formation), Afaal (functions), Aur inke baahami tanasub (& their differential count ، کریات بیضاء : ساخت،اجزائے ترکیبی، پیدائش ، نمو اور انجام ،مجموعی تعداد، اور انکے باھمی تناسب ، مقدار کی تخمین کے طریقے اور انکے فعلیاتی اختلاف | | | | |
| | (f) Aqrase damviya (platelets) ki Saqht (structure), Paidaish (formation) & Afaal (functions). اقراص دمویہ کی ساخت، پیدائش اور افعال | | | | |
| | (g) Injimaduddam (coagulation of blood) ki Tareef (definition), Awamil e injimaduddam (coagulation factors), Waqfa-e-jiryanuddam (bleeding time), Waqfa-e-injimaduddam (clotting time) aur unki takhmeen (and their estimation) انجمادالدم کی تعریف،عوامل انجمادالدم،وقفہ جریان الدم، وقفہ انجمادالدم اور انکی تخمین | | | | |
| | (h) Khoon ki girohbandi (Blood Groups) خون کی گروہ بندی | | | | |
| | (i) Intiqaluddam (blood Transfusion) & Blood Banks انتقال الدم | | | | |
| **4** | ***Nizam-e-Urooq-i-Lymphavia aur Shabki-o-Bashree Baatini*** **(Lymphatic & Reticulo-endothelial system** نطام عروق لمفاویہ اورشبکی و بشری باطنی | I | 5 | 03 | 02 |
| | (a) Rutubat-e-limfavia ki paidaish aur tarkeeb (formation and composition of lymph) رطوبت لمفاویہ کی پیدائش اور ترکیب | | | | |
| | (b) Rutubat-e-limfavia ka dauran (lymphatic channels and lymphatic drainage) رطوبت لمفاویہ کا دوران | | | | |
| | (c) Ghudood-e- limfavia (lymph glands)غدود لمفاویہ | | | | |
| | (d) Nizam-e-shabkiya mubtina ki tamheed aur afaal (introduction to reticulo-endothelial system, and its functions)نطام شبکیہ مبطنہ کی تمہید اور افعال | | | | |
| | (e) Tihaal aur iske afaal (spleen & its functions). طحال | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | اور اسکے افعال | | | | |
| **5** | ***Nizam-e-Dauran-e-Khoon* ( Circulatory system)**<br>نظام دوران خون | III | 20 | 23 | 15 |
| | (a) Tareef(introduction) تعریف | | | | |
| | (b) Samamaat-e-qalb aur inke afaal (valves of heart and their actions)<br>صمامات قلب اور انکے افعال | | | | |
| | (c) Qalb ke makhsoos itsaali ansaja (special junctional tissues),<br>قلب کے مخصوص اتصالی انسجہ | | | | |
| | (d) Azla-e-qalb ki khusoosiyat (properties of cardiac muscles)<br>عضلہ قلب کی خصوصیات | | | | |
| | (e) Daura-e-qalbi (cardiac cycle) دورہ قلبی | | | | |
| | (f) Aswaat-e-qalb (heart sounds) اصوات قلب | | | | |
| | (g) Suqoot-e-qalb (heart block) سقوط قلب | | | | |
| | (h) Aasaab-e-qalb (nerves of the heart), اعصاب قلب | | | | |
| | (i) Mrakaz-e-qalb aur iske afaal (cardiac centre & its function) مرکز قلب اوراسکے افعال | | | | |
| | (j) Barqi qalb nigari (electro-cardiograph برقی قلب نگاری | | | | |
| | (k) Fisharruddum aur iske feliyati avamil (blood pressure and its physiological control) فشارالدم اوراسکے فعلیاتی عوامل | | | | |
| **6** | ***Hayateen* (Vitamins)**<br>حیاتین | II | 10 | 6 | 04 |
| | (a) Hayateen ki tareef (definition)حیاتین کی تعریف | | | | |
| | (b) Aqsaam (types) اقسام | | | | |
| | (c) Miqdar khurak (daily requirement) مقدار خوراک | | | | |
| | (d) Afaal (functions) افعال | | | | |
| **7** | ***Istehala* (Metabolism)**<br>استحالہ | III | 10 | 17 | 11 |
| | (a) Istehala ki tareef (introduction to metabolism)<br>استحالہ کی تعریف | | | | |
| | (b) Nashasta ka istehala (metabolism of carbohydrate) نشاستہ کا استحالہ | | | | |
| | (c) Shamiyat ka istehala (metabolism of lipids شحمیات کا استحالہ | | | | |
| | (d) Humooz-e-shorain ka istehala (metabolism of amino acids)حموض شورین کا استحالہ | | | | |
| | (e) Madaniyat aur paani ka istehala (mineral and water metabolism).معدنیات اور پانی کا استحالہ | | | | |
| **Total** | | | | **97** | **58** |

**Table 2: Contents of Manafeul Aza - Paper – II (Theory)**

| | A2<br>List of Topics UNIUG-MZ | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| **1.** | ***Nizam-e-Hazm* (Digestive system)**نظام هضم | I | 15 | 17 | 07 |
| | (a) Tamheed-e-nizam-e-hazm (introduction of digestive system)<br>تمهید نظام هضم | | | | |
| | (b) Khurd beeni sakht of ghudood-e-luabiya (histological structure of salivary glands), luab-e-dahan ki tarkeeb (composition of saliva)<br>غدود لعابیہ کی خوردبینی ساخت،لعاب دھن کی ترکیب | | | | |
| | (c) Tarssho aur afaal (secretion of saliva and functions) لعاب دہن کا ترشح اور افعال | | | | |
| | (d) Rutubat-e-maaddi (gastric juice) رطوبات معدی | | | | |
| | (e) Rutubat-e-mayvi, aur rutubat-e-safravi ki tarkeeb,tarassho aur afaal (composition of succus entericus and bile secretion and their functions)<br>رطوبات معوی اور رطوبات صفراوی کی ترکیب ، ترشح اور افعال | | | | |
| | (f) Majra-e-ghizai ke harkat aur unke afaal (movements of alimentary canal and their functions<br>مجریٰ غذائی کی حرکات اور انکے افعال | | | | |
| | (g) Fuzla ki paidaish-o-iqhraj (formation of faeces and defecation)<br>فضلہ کی پیداش و اخراج | | | | |
| | (h) Jigar ki saaqht-o-afaal, (structure and & functions of liver)<br>جگر کی ساخت و افعال | | | | |
| | (i) hazm-e-nishashta (digestion of carbohydrate), هضم نشاستہ | | | | |
| | (j) hazm-e- shorain (digestion of protein) هضم شورین | | | | |
| | (k) andhazm-e-shaham (digestion of lipids) هضم شحم | | | | |
| | (l) paani ka injezab (absorption of water) پانی کا انجذاب | | | | |
| **2.** | ***Nizam-e-Tanaffus* (Respiratory system)**<br>نظام تنفس | I | 15 | 16 | 11 |
| | (a) Mukhtalif tanaffussi aaza ki tamheed (introduction of respiratory system/organs)مختلف تنفسی اجزاء کی تمہید | | | | |
| | (b) Aaza –i- tanaffys ki Khurd beeni sakht | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | (histological structure)<br>اجزائے تنفسی کی خوردبینی ساخت | | | | |
| | (c) Uzlaat-e-tanaffuss aur unke afaal (respiratory muscles & functions of respiratory system/organs)<br>عضلات تنفس اور انکے افعال | | | | |
| | (d) Oxygen aur carbon di oxide ki muntaqeeli (transport of oxygen & carbon dioxide) آکسیجن اور کاربن ڈائی آکسائڈ کی منتقلی | | | | |
| | (e) Riya aur insaja may gason ka tabadila (gaseous exchange in lungs and tissues)<br>ریہ اور انسجہ میں گیسوں کا تبادلہ | | | | |
| | (f) Tanaffuss ke marakiz (centers of respiration)<br>تنفس کے مراکز | | | | |
| | (g) Masnooi tanaffuss aur inke mukhtalif tareeqe (artificial respiration and its methods) مصنوعی تنفس اوران کے مختلف طریقے | | | | |
| | (h) Jasamat-e-reviya (pulmonary volume) جسمات ریویہ | | | | |
| | (i) Waqaat-e-reviya (pulmonary capacities) وقعت ریویہ | | | | |
| | (j) Usre tanaffuss (dyspnoea)عسر تنفس | | | | |
| | (k) Qillat-e-baad (anoxia) قلت باد | | | | |
| | (l) Dushwaar-e-tanaffuss (apnoea)دشوار تنفس | | | | |
| | (m) Izdiyad-e-tanaffuss (hypercapnia)ازدیاد تنفس | | | | |
| | (n) Sat-he-martafa aur gehre paani ke feliyati asraat (physiological effect of high altitude & under water)<br>سطح مرتفع اور گہرے پانی کے فعلیاتی اثرات | | | | |
| **3.** | ***Nizam-e-Ikhraj* ( Excretory system)**<br>نظام اخراج | II | 15 | 14 | 11 |
| | (a) Kulliya ki saqht-o-afaal (Structure and function of kidney) کلیہ کی ساخت وافعال | | | | |
| | (b) Aljihazul mujawiru lilkubaiba ( juxta--glomerular apparatus and renin- angiotensin system) الجہازالمجاورہ للکبیبہ اور نطام رینن و انجیوٹنسن | | | | |
| | (c) Paidaish-e- bowl, tarkeeb-e-bowl, aur miqhdaar-e-bowl (urine formation, quantity & concentration of urine) پیدائش بول ، ترکیب بول اور مقدار بول | | | | |
| | (d) Renal regulation of fluid and electrolytes and acid-base balance<br>توازن کہارل اور توازن حمضی قلوی میں کلیہ کا کردار | | | | |
| | (e) iqhraj-i- bowl aur iska mechania (micturition and its mechanism) اخراج بول اور اسکامیکانیہ | | | | |
| | (f) masana aur uske su-e- afaal (urinary bladder | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | and its abnormalities )<br>مثانہ اور اس کی خرابیاں | | | | |
| | (g) Artificial kidney, dialysis and renal transplantation<br>مصنوعی کلیہ،ڈائلیسس اورزَرْع الکلیہ | | | | |
| | (h) Renal function tests<br>اخْتِبار وَظيفَة الكُلْيَة | | | | |
| | (i) Unani conepts of idrar-e-bowl<br>ادرار بول کا یونانی طبی مَفهُوم | | | | |
| **4.** | ***Nizam-e-jild* (Integumentary system)**<br>نظام جلد | II | 10 | 04 | 02 |
| | (a) Jild ki sakht aur afaal (structure and functions of skin) [integument],<br>جلدکی ساخت و افعال | | | | |
| | (b) Paseena (sweat) پسینہ | | | | |
| | (c) Hararat-e-badaniya ka tavazun, (regulation of body temperature)<br>حرارت بدنیہ کا توازن | | | | |
| | (d) Ghair tabiyyee hararat aur qillate-hararat (abnormal and sub-normal temperature). غیر طبعی حرارت و قلت حرارت | | | | |
| **5.** | ***Nizam-e-Aasab* ( Nervous system)**<br>نظام اعصاب | II | 15 | 19 | 11 |
| | i. Organization of nizam-e-aasab (nervous system)تنظیم نظام اعصاب | | | | |
| | ii. Naseej-e- asabi (neural tissue)نسیج عصبی | | | | |
| | iii. Leef-e= asabi (Nerve fibers) لیف عصبیی | | | | |
| | iv. Mashbak/ittisal (synapse):اتصال/مشبک | | | | |
| | v. Asabi mursalat (neurotransmitters) عصبی مرسلات | | | | |
| | vi. Markazi nizam-e- asab (Central nervous system) مرکزی نظام اعصاب | | | | |
| | vii. Assabeel-o shabkiya hissi (Sensory pathways and tracts) السبیل و شبکیہ حسی | | | | |
| | viii. Nizam-e-harkiyah (Motor system) نظام حرکیہ | | | | |
| | ix. Alfailur-rudood (Reflexes)الفعل ردود | | | | |
| | x. Muqheeqh uqda-e qaidiyyah (Cerebellum & basal ganglia)مخیخ اور عقدہ قعدیہ | | | | |
| | xi. Nizame asabi la iradi (Autonomic nervous system)<br>الجهاز العصبي اللاإرادي | | | | |
| | xii. nuqha (Spinal cord)نخاع | | | | |
| | xiii. maseerutus sailunuqhayi (Cerebero-spinal fluid)مسیرۃ السائل النخاعی | | | | |
| | xiv. Al naum (Physiology of sleep) النوم | | | | |
| | xv. Waj-o- alam (Physiology of pain) وجع و الم | | | | |
| | xvi. EEG & nerve tests | | | | |

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|---|---|---|---|---|---|
| | xvii. Unani concept of quwwat-e-nafsaniyyah قوت نفسانیہ | | | | |
| | xviii. Quwwat-e zaiqah wa shammah (the taste and smell sensation) قوت ذائقہ و شامہ | | | | |
| | xix. Uzn (Ear) اذن | | | | |
| | xx. Ghisha-e tabli aur azeematusameiyyah (Tympanic membrane and the ossicular system) غشاء طبلی اور عظیمات السمعیہ | | | | |
| | xxi. Cochlea قوقلیا | | | | |
| | xxii. Saut (Sound ) صوت | | | | |
| | xxiii. Mechania-e quwwat-e-saut-e-markazi (Central auditory mechanisms) میکانیہ قوت صوت مرکزی | | | | |
| | xxiv. Hearing test | | | | |
| | xxv. Eye عین | | | | |
| | xxvi. Ratubat-e- ain (Fluid system of the eye) رطوبات عین | | | | |
| | xxvii. Photochemistry of vision الكيمياء الضوئية للرؤية | | | | |
| | xxviii. Ruyiyat ka mechania (Physiology of vision) رؤیت کا میکانیہ | | | | |
| | xxix. Harkat-e-ain (Eye movements) حرکات عین | | | | |
| **6.** | ***Nizam-e-ghudood* la qanatiyah ( Endocrine system)** | III | 15 | 19 | 10 |
| | (a) Ghudood-e-la qanatiyah (endocrine gland) غدودلا قناتیہ | | | | |
| | (b) Tanzeem-e-afraz rasilat (regulation of hormones) تنظیم افرازرسیلات | | | | |
| | (c) Rasilat ka mekaniya-i- amal (Mechanism of action of hormones) رسیلات کا میکانیہ عمل | | | | |
| | (d) Rasilat aur istihala-e- kailshium (Hormones and calcium metabolism) رسیلات اور استحالہ کیلشیم | | | | |
| | (e) Taht-us-sarir (hypothalamus) تحت السریر | | | | |
| | (f) Ghudda nukhamiyah (pituitary gland) غدہ نخامیہ | | | | |
| | (g) Rasila-e-namu (growth hormone ) رسیلہ نمو | | | | |
| | (h) Ghudda-e-nukhmiya muaqqhar (posterior pituitary) غدہ نخامیہ مؤخر | | | | |
| | (i) Ghudda-e-darqiyyah (thyroid gland) غدہ درقیہ | | | | |
| | (j) Ghudda-e- kazriyyah (adrenal glands) غدہ کزریہ | | | | |
| | (k) Banqiras (pancreas):بانقراس | | | | |
| | (l) Ghudda sa'atariyyah (thymus) and ghhudda-e-sanobariyyah (pineal gland): غدہ صعتریہ اور غدہ صنوبریہ | | | | |
| | (m)Thyroid function tests | | | | |
| | (n) Endocrine consequences and metabolism | | | | |
| **7.** | ***Nizam-e-tauleed* (Reproductive system)** | III | 15 | 14 | 10 |
| | (a) Sex differentiation & determination | | | | |
| | (b) Bulooghat (puberty): بلوغت | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | (c) Nizam-e-tauleed mardana (male reproductive system) نظام تولید مردانہ | | | | |
| | (d) Rasila-e-khusya (testosterone) رسیلہ خصیہ | | | | |
| | (e) Ghudda-e-madhi(prostate) غدہ مذی | | | | |
| | (f) Nizame tawleed zanana(female reproductive system) ) نظام تولید زنانہ | | | | |
| | (g) Rasila muwallid-i- bayda (oestrogen) and rasila mu'in al-haml (progesterone): رسیلہ مولد بایئدہ و رسیلہ معین حمل | | | | |
| | (h) Hamal (pregnancy), wiladat (parturition) & ilban / amal-e-raza'at (lactation) حمل، ولادت و عمل رضاعت | | | | |
| | (i) Iyas (menopause) ایاس | | | | |
| | (j) Unani concepts of quwwat-e-tanasulliya قوت تناسلیہ کا طبی مفہوم | | | | |
| **Total** | | | | **103** | **62** |

**Table 2: Contents of Manafeul Aza (Practical)**

| | A2<br>List of Topics UNIUG-MZ | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| **1** | **General physiology** | I | 18 | | 76 |
| | Stethoscope | | | | |
| | Microscope | | | | |
| | Body Temperature | | | | |
| **2** | **Respiratory System** | I | 12 | | 20 |
| | Respiratory sounds | | | | |
| | Lung volume/ capacities | | | | |
| **3** | **Digestive System** | I | 10 | | 12 |
| | BMI | | | | |
| | Bowel sounds | | | | |
| **4** | **Haematology** | II | 16 | | 70 |
| | Types of blood samples | | | | |
| | Blood Plasma | | | | |
| | Serum | | | | |
| | Blood cells | | | | |
| | Erythrocytes | | | | |
| | Leucocytes | | | | |
| | Haemoglobin | | | | |
| | Blood groups | | | | |
| | Blood Indices | | | | |
| **5** | **Urology** | II | 14 | | 36 |
| | Physical examination of urine | | | | |
| | Microscopic examination of urine | | | | |
| | Chemical examination of urine | | | | |

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|---|---|---|---|---|---|
| **6** | **Cardio vascular system** | III | 14 | | 32 |
| | Radial pulse | | | | |
| | Blood Pressure | | | | |
| | ECG | | | | |
| | Heart sounds | | | | |
| **7** | **Nervous System** | III | 8 | | 20 |
| | EEG | | | | |
| | NCT | | | | |
| **8** | **Special Senses** | III | 8 | | 14 |
| | Perimetry | | | | |
| | Visual acuity | | | | |
| | Colour vision | | | | |
| | Conduction of sound | | | | |
| **Total** | | | | | **280** |

**Table 3: Learning objectives of Manafeul Aza UNIUG-MZ - Paper – I (Theory)**

| 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 to know | E3 Level Does/shows / Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- Umoomi Manafeul Aza (general physiology)** (Lecture:- 09 hours, Non lecture 05hour) | | | | | | | | | |
| CO1 | Define Manafeul Aza | Cognitive/Recall | MK | K | Lecture | Written/ viva- voce | F & S | I | |
| CO1 | Explain Homeostasis and its significance | Cognitive/Recall | MK | KH | Lecture / Small group discussion | Written/ Open Book Test, | F & S | | |
| CO2, CO3 | Describe transport across cell membrane | Cognitive/Recall | MK | KH | Lecture/ Educational videos | Written/ viva- voce | F & S | I | |
| CO2, CO3 | Explain Action potential | Cognitive/Recall | MK | KH | Lecture | Written/ viva- voce | F & S | I | |
| CO2, CO3 | Describe muscle physiology | Cognitive/Recall | MK | KH | Lecture/symposium | Written/ viva- voce | F & S | I | |
| CO2, CO3 | Describe structure and biochemistry of macromolecules | Cognitive/Recall | MK | K | Lecture | Written/ viva- voce | F & S | I | |
| CO2, CO3 | Explain protein synthesis | Cognitive/Recall | MK | K | Lecture/ Tutorials | Written/ viva- voce | F & S | I | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO2, CO3, CO4 | Describe Acid-base balance | Cognitive/Recall | MK | K | Lecture/ Small group discussion/ PBL | Written/ viva- voce | F & S | I | |
| CO2, CO3, CO4 | Describe water balance | Cognitive/Recall | MK | K | Lecture/ Small group discussion | Written/ Project Work | F & S | I | |
| **Topic 2- Study of Khulia and Insaja (Cytology and Histology)** (Lecture:- **09** hours, Non lecture **06**hours) | | | | | | | | | |
| CO2 | Explain cytology and histology | Cognitive/Recall | MK | K | Lecture | Written | F & S | I | |
| CO2 | Explains in detail about the structure and functions of the Khulia (cell) | Cognitive/Recall | MK | K | Lecture/ symposium | Written | F & S | I | |
| CO2 | Describes the Taqseem-e-Khulia (cell division) | Cognitive/Recall | MK | KH | Lecture/discussion/ symposium | Written | F & S | I | |
| CO2, CO5 | Gene mutations, Chromosomal aberrations | Cognitive/Recall | MK | KH | Lecture/discussion/ symposium | Written | F & S | I | |
| CO2 | Define and classify the cell junctions | Cognitive/Recall | NK | K | Lecture/symposium | Written /viva voce | F | I | |
| CO1, CO2 | Explain about the cell death | Cognitive/comprehensions | DK | KH | Lecture/discussion | Written/viva Voce | F & S | I | |
| CO2 | Define and classify the Insaja | Cognitive/Recall | MK | K | Lecture | Written | F & S | I | |
| CO2 | Describe the structure and functions of Naseej- | Cognitive/comprehens | MK | K | Lecture/ symposium | Written | F & S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| | e-Bashri (Epithelial tissues) | ions | | | | | | | |
| CO2 | Describe the structure and functions of Naseej-e-Wasil (connective tissues) | Cognitive/comprehensions | MK | K | Lecture/ symposium | Written | F & S | I | |
| CO2 | Describe the structure and functions of Naseej-e-Azli (muscle tissues) | Cognitive/comprehensions | MK | K | Lecture/ symposium | Written | F & S | I | |
| CO2 | Describe the structure and functions of Naseej-e-Asbi (nervous tissues) | Cognitive/comprehensions | MK | K | Lecture/ symposium | Written | F & S | I | |
| **Topic 3-*Khoon wa Nizam-i-Damwi* (Blood & Haemopoetic System)** (Lecture:- **30** hours, Non lecture **15**hours) | | | | | | | | | |
| CO2 | Define the Khoon and explain its properties, compositions and functions | Cognitive/ Recall | MK | K | Lecture | Written | F & S | II | |
| CO2 | Describe the Sayyal-e-Damwi Lahmi (plasma proteins) | Cognitive/ comprehensions | MK | K | Lecture/symposium | Viva voce | F & S | II | |
| CO2 | Differentiate between plasma and serum | Cognitive/ comprehensions | MK | KH | Group discussion | Written/Viva voce | F&S | II | |
| CO2 | Describe the structure and morphology of | Cognitive/ comprehe | MK | K | Lecture/discussion | Written/ Viva voce | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| | Kurriyat-i-Hamra (RBCs) | nsions | | | | | | | |
| CO2 | Explain the properties of Kurriyat-i-Hamra | Cognitive/ comprehe nsions | MK | K | Lecture/symposium | Written/ Viva voce | F & S | II | |
| CO2 | Define and Describe the synthesis of Kurriyat-i-Hamra (Erythropoiesis) | Cognitive/ Recall | MK | K | Lecture/symposium | Written/ Viva voce | F & S | II | |
| CO2 | Describe the site for Erythropoiesis in foetus and adult | Cognitive/ comprehe nsions | DK | K | Educational video /Lecture/discussion | Written/ Viva voce | F & S | II | |
| CO2, CO4 | Enumerate the factors necessary for Erythropoiesis | Cognitive/ Recall | MK | K | Lecture/discussion | Viva voce | F & S | II | |
| CO2, CO4 | Describe regulation of Erythropoiesis | Cognitive/ comprehe nsions | MK | KH | Lecture/discussion | Viva voce | F & S | II | |
| CO2 | Explain the lifespan and the fate of Kurriyat-i-Hamra | Cognitive/ comprehe nsions | MK | K | Lecture/PBL | Written/ Viva | F & S | II | |
| CO2 | Describes the functions of Kurriyat-i-Hamra | Cognitive/ comprehe nsions | MK | K | Lecture/ | Written/ Viva | F & S | II | |
| CO1, CO2, CO5 | Explain the physiological & pathological variations in number of RBCs | Cognitive/ comprehe nsions | MK | Kh | Lecture/PBL | Written/ Viva | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO2, CO3 | Define and classify the Faqrud-Dum (anaemia) | Cognitive/ Recall | MK | K | Lecture/symposium | Written/ Viva | F & S | II | |
| CO1, CO2 | Explain the morphological variations of RBCs | Cognitive/ comprehensions | MK | Kh | Lecture | Written/ Viva | F & S | II | |
| CO4 | Explain the Applied physiology of ESR | Cognitive/ comprehensions | MK | Kh | Small group discussion | Written/ Viva | F & S | II | |
| CO4 | Explain the applied physiology of packed cell volume | Cognitive | MK | K | Small group discussion | Written/ Viva | F & S | II | |
| CO4, | Define and explain in detail about the blood indices | Cognitive | NK | K | Small group discussion | Written/ Viva | F & S | II | |
| CO2 | Explain the structure & functions of Hamratud-Dum (Haemoglobin) | Cognitive/ Recall | MK | K | Lecture/concept map | Written/ Viva | F & S | II | |
| CO2 | Describe the synthesis of Hamratud-Dum | Cognitive/ Recall | MK | K | Video clip /Lecture | Written/ Viva | F & S | II | |
| CO2, CO3 | Fate/destruction of Hamratud-Dum | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO2 | Explain the types of Hamratud-Dum | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO5 | Explain the disorders related to Hamratud-Dum | Cognitive/ comprehensions | DK | Kh | PBL/discussion | Written/ Viva | F & S | II | |
| CO2 | Define & classify the Kurriyat-e-Baiza (white | Cognitive/ | MK | K | Lecture | Written/ Viva | F & S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | blood cells) | Recall | | | | | | | |
| CO2 | Explain the morphology of Kurriyat-e-Baiza | Cognitive/ comprehensions | MK | Kh | Concept map/Lecture | Written | F & S | II | |
| CO2 | Describe the formation of Kurriyat-e-Baiza (leucopoiesis) | Cognitive/ comprehensions | DK | Kh | Lecture | Written | F & S | II | |
| CO6, CO8 | Describe the normal values of total leucocytes count and differential leucocytes count | Cognitive/ comprehensions | MK | Kh | Symposium | Written/ Viva | F & S | II | |
| CO2 | Describe the properties & functions of Kurriyat-e-Baiza | Cognitive/ Recall | MK | K | Lecture/symposium | Written/ Viva | F & S | II | |
| CO2, CO4, CO5 | Explain the physiological & pathological variations of Kurriyat-e-Baiza | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO6, CO9 | Explain and demonstrate Sahli's hemoglobinometer | Cognitive/ comprehensions | MK | S | Lecture/ Demonstration/ practical | Viva | F & S | II | |
| CO2, CO3 | Define & classify the Mana-at (Immunity) | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO2, CO3 | Define & describe the types of antigen | Cognitive/ Recall | DK | K | Lecture/Project work | Written/ Viva | F & S | II | |
| CO2, CO3 | Describe the development of cell | Cognitive/ comprehe | MK | Kh | Lecture | Written/ | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| | mediated immunity | nsions | | | | Viva | | | |
| CO2, CO3 | Describe the development of humoral immunity | Cognitive/ comprehe nsions | MK | Kh | Lecture | Written/ Viva | F & S | II | |
| CO2, CO3 | Define and describe the types of cytokines | Cognitive/ comprehe nsions | DK | Kh | Lecture/discussion | Written/ Viva | F & S | II | |
| CO2, CO7, CO8 | Explain in detail about immunization | Cognitive/ comprehe nsions | NK | Kh | Lecture/small group discussion | Written/ Viva | F & S | II | |
| CO5, CO7, CO8 | Explain & compare the immune deficiency diseases & autoimmune diseases | Cognitive/ comprehe nsions | NK | Kh | Lecture/PBL | Viva | F & S | II | |
| CO2, CO4, CO5 | Explain in detail about allergy & immunological hypersensitive reactions | Cognitive/ comprehe nsions | NK | Kh | Lecture/discussion | Written/ Viva | F & S | II | |
| CO2, CO6 | Define & describe the normal value, structure and composition of Aqras-e-Damwiya (platelets) | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO2 | Describe the properties of platelets | Cognitive/ Recall | MK | K | Lecture/ seminar | Written/ Viva | F & S | II | |
| CO2 | Describe the functions of platelets | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO2, CO3, | Explain the physiological | Cognitive/ | MK | K | | Written/ | F & S | II | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO4, CO6 | variations in number of platelets | Recall | | | Lecture | Viva | | | |
| CO2 | Explain the formation of platelets | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO1, CO2 | Explain the lifespan & fate of platelets | Cognitive/ Recall | MK | K | Lecture/discussion | Written/ Viva | F & S | II | |
| CO4, CO5 | Describe the applied physiology of platelets | Cognitive/ Recall | DK | K | Lecture/discussion | Written/ Viva | F & S | II | |
| CO1, CO2 | Define & explain the stages of Haemostasis | Cognitive/ Recall | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO1, CO2 | Define & explain Injimadud-Dam (coagulation of blood) and blood clotting factors | Cognitive/ Recall | MK | K | Lecture/symposium | Written/ Viva | F & S | II | |
| CO1, CO2 | Explain in detail about the stages of blood clotting | Cognitive/ comprehe nsions | MK | K | Lecture/discussion | Written/ Viva | F & S | II | |
| CO1, CO6, CO8 | Define & explain the blood clot, clot retraction and fibrinolysis | Cognitive/ comprehe nsions | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO1, CO3, CO7 | Describe the mechanism preventing intravascular blood clotting | Cognitive/ comprehe nsions | MK | K | Lecture | Written/ Viva | F & S | II | |
| CO1, CO5, | Explain in detail about thrombosis | Cognitive/ comprehe | DK | K | Lecture | Written/ | F & S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO8 | | nsions | | | | Viva | | | |
| CO4, CO8 | Explain in detail about Haemophilia, purpura and von willebrand disease | Cognitive/ comprehe nsions | DK | Kh | Lecture/PBL | Written/ Viva | F & S | II | |
| CO6, CO7, CO8, CO9 | Describe in detail about the Khoon ki girohbandi (various blood grouping system) | Cognitive/ comprehe nsions | MK | Kh | Lecture/symposium | Written/ Viva | F & S | II | |
| CO6, CO8 CO9 | Demonstrate the procedure of blood grouping & determine the ABO group | Psychomo tor | MK | S | Lecture/Practical/ Demonstration | Written/ Viva Practical | F & S | II | |
| CO6, CO8 | Define & explain in detail about the blood transfusion | Cognitive/ Recall | MK | K | Lecture/symposium | Written/ Viva | F & S | II | |
| CO4 | Explain in detail about the transfusion reactions | Cognitive/ comprehe nsions | MK | Kh | Lecture/discussion | Written/ Viva | F & S | II | |
| CO4 | Explain about the Rh incompatibility & its complications in fetus | Cognitive/ comprehe nsions | MK | Kh | Lecture/Small group discussion | Written/ Viva | F & S | II | |
| CO6, CO7, CO8 | Describe the exchange transfusion & autologous blood transfusion | Cognitive/ comprehe nsions | MK | Kh | Lecture/PBL | Written/ Viva | F & S | II | |

**Topic 4- *Nizam-e-Urooq-e-Lymphavia aur Shabki-o-Bashree Baatini*** **(Lymphatic & Reticulo-endothelial system)**

(Lecture:- **03** hours Non lecture **02**hours)

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|---|---|---|---|---|---|---|---|---|---|
| CO2 | Define and explain Nizam Urooq-e-Limfavia (lymphatic system) | Cognitive/ Recall | MK | K | Lecture | Written | F & S | II | |
| CO2 | Explain the composition & formation of Rutubat-e-Lymphavia (lymph) | Cognitive/comprehensions | MK | Kh | Lecture/ discussion | Written/ Viva voce | F & S | II | |
| CO1, CO2, CO4 | Describe in detail about the lymphatic channel & drainage of lymphatic system | Cognitive/comprehensions | MK | Kh | Lecture/Small group discussion | Written/viva | F & S | II | |
| CO2, CO4 | Explain the structure & functions of lymph nodes/glands | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | II | |
| CO2, CO8 | Define & explain the Nizam-e-Shabki-o-Bashree Baatini (Reticuloendothelial System) | Cognitive/ Recall | MK | Kh | Lecture/symposium | Written | F & S | II | |
| CO2 | Classify the reticulo-endothelial cells | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | II | |
| CO2 | Explain the functions of reticulo-endothelial system | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |

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| CO2 | Describe the structure & functions of Tihal (spleen) | Cognitive/comprehensions | MK | Kh | Lecture | Written | F & S | II | |
| **Topic 5- *Nizam-e-Dauran-e-Khoon* ( Circulatory system)**(Lecture:- **23** hours, Non lecture **15**hours) | | | | | | | | | |
| CO2 | Describe the functional anatomy of the Qalb (heart) including the chambers and layers of heart wall | Cognitive/Recall | MK | K | Lecture/symposium | Written/viva | F & S | III | |
| CO2, CO4, CO5 | Explain the Samamat-e-Qalb (valves of heart) & its applied physiology | Cognitive/Recall | MK | K | Lecture/symposium / Discussion | Written/viva | F & S | III | |
| CO2 | Explain in detail about systemic circulation, pulmonary circulation and coronary circulation | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO2 | Describe foetal circulation | Cognitive/comprehensions | NK | Kh | Small group discussion | Written/viva | F & S | III | |
| CO2 | Describe in detail of properties of cardiac muscle | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO2, CO4, | Define & explain in detail about the | Cognitive/Recall | MK | K | Lecture/symposium | Written/viva | F & S | III | |

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| | Daura-e-Qalbi (cardiac cycle) | | | | | | | | |
| CO2, CO4, CO8 | Describe in detail about the Aswat-e-Qalb (heart sounds) including normal & abnormal | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO2, CO6, CO9 | List the methods of study of heart sounds | Cognitive/Recall | MK | K | Lecture/Practical/ Demonstration | Written/viva Practical | F & S | III | |
| CO2, CO8 | Explain and demonstrate the auscultation areas | Cognitive/Recall | MK | K | Lecture/ demonstration | Written/viva practical | F & S | III | |
| CO2 | Describe in detail about the components of conductive system of the heart/junctional tissues of the heart | Cognitive/Recall | MK | K | Lecture | Written/viva | F & S | III | |
| CO2, CO4, CO5 | Describe the heart rate & its Physiological & pathological variations | Cognitive/comprehensions | MK | Kh | Lecture/Tutorial | Written/viva | F & S | III | |
| CO2, CO4, | Describe regulation of heart rate | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1, CO2 | Explain the vasomotor center | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1, | Explain the factors | Cognitive/c | | Kh | | | | III | |

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| CO2 | affecting the vasomotor center | omprehens ions | MK | | Lecture/discussion | Written/viva | F & S | | |
| CO1, CO2 | Define the baroreceptors & chemoreceptors and explain their role on heart rate | Cognitive/R ecall | MK | K | Lecture/discussion | Written/viva | F & S | III | |
| CO2, CO4, CO5 | Define & Explain in detail about the venous return, and cardiac output | Cognitive/R ecall | MK | K | Lecture | Written/viva | F & S | III | |
| CO2, CO6 CO8 | Describe the stroke volume, minute volume, ejection fraction | Cognitive/c omprehens ions | MK | Kh | Lecture/ Tutorial | Written/viva | F & S | III | |
| CO2, CO8 | Describe the end-systolic volume & end-diastolic volume | Cognitive/c omprehens ions | MK | Kh | Lecture | Viva voce | F & S | III | |
| CO2, CO4 | Describe the physiological variations and regulation of cardiac output. | Cognitive/c omprehens ions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO2, CO5, CO8 | Describe the heart block | Cognitive/c omprehens ions | NK | K | Lecture/symposium | Written/viva | F & S | III | |
| CO2, CO5 | Describe the circulatory shock and heart failure | Cognitive/c omprehens ions | NK | K | Lecture/discussion | Open Book Test/ viva voce | F & S | III | |
| CO5 | Describe the pathophysiology of | Cognitive/c | DK | Kh | Small group | Written/viva | F & S | III | |

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| | various types of shock and syncope | omprehens ions | | | discussion /Self-directed learnings | | | | |
| CO6, CO9, CO10 | Define & explain the Barqi Qalb Nigari (Electrocardiography) (ECG) | Cognitive/Recall | MK | K | Lecture | Written/viva | F & S | III | |
| CO7, CO8 | Describe the significance/usage of the ECG | Cognitive/comprehensions | MK | K | Lecture/Project work | Written/viva | F & S | III | |
| CO6, CO8 | Describe the ECG grid, ECG leads | Cognitive/comprehensions | MK | K | Lecture | Written/viva | F & S | III | |
| CO6, CO8 | Describe the waves of normal ECG, Intervals & segments of ECG | Cognitive/comprehensions | MK | K | Lecture/discussion | Written/viva | F & S | III | |
| CO6, CO9 | Illustrate the Normal ECG with electrocardiograph | Psychomotor | MK | S | Lecture/ Practical/ Demonstration | Written/viva | F & S | III | |
| CO5 CO6 CO7 CO8 | Describe the abnormal ECG, Arrhythmias, heart block, and Myocardial changes | Cognitive/comprehensions | MK | K/KH | Small group discussion /PBL | Written/viva | F & S | III | |
| CO2, CO8 | Define the Fisharud-Dam (Blood pressure) | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1, CO2, CO4 | Explain the physiological variations of blood | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |

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| | pressure | | | | | | | | |
| CO1, CO2, CO4 | Describe the factors maintaining the blood pressure | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO1, CO2, CO7 | Explain in detail about various mechanism for regulation of blood pressure | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO4, CO5, CO7 | Explain the pathological variations of blood pressure (hypertension & hypotension) | Cognitive/comprehensions | DK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO6, CO9, | Describe the methods for blood pressure measurement | Cognitive | MK | KH | Lecture/discussion | Viva voce | F & S | III | |
| **Topic 6- *Hayateen* (Vitamins)** (Lecture:- **06** hours, Non lecture **04** hours) | | | | | | | | | |
| CO2 | Define & describe the Hayateen (Vitamins)& describe history & discovery of vitamins | Cognitive/Recall | MK | K | Lecture/Tutorial | Written/viva | F | II | |
| CO2 | Classify the vitamins | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |

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| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin A | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin A | Cognitive/comprehensions | MK | Kh | Lecture/discussion/ PBL | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin D | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin D | Cognitive/comprehensions | MK | Kh | Lecture/discussion/ PBL | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin E | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to | Cognitive/comprehens | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |

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| | Vitamin E | ions | | | | | | | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin K | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin K | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin C | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin C | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, &biochemical functions of Vitamin B-1 (thiamine) | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |

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| CO5 | Describe the Disorders related to VitaminB-1 (thiamine) | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-2 (riboflavin) | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin B-2 (riboflavin) | Cognitive/Recall | MK | K | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-3 (Niacin) | Cognitive/Recall | MK | K | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin B-3 | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | II | |

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| | requirements, & biochemical functions of Vitamin B-5 (Pantothenic acid) | | | | | | | | |
| CO5 | Describe the Disorders related to Vitamin B-5 (Pantothenic acid) | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-6 (Pyridoxine) | Cognitive/comprehensions | MK | Cognitive/comprehensions | Lecture/symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin B-6 (Pyridoxine) | Cognitive/comprehensions | MK | Cognitive/comprehensions | Lecture/ discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-7 (Biotin) | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to | Cognitive/comprehens | MK | Kh | Lecture/ discussion | Written/viva | F & S | II | |

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| | Vitamin B-7(Biotin) | ions | | | | | | | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-9 (Folate/folic acid) | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin B-9 (Folate/folic acid) | Cognitive/comprehensions | MK | Kh | Lecture/ discussion | Written/viva | F & S | II | |
| CO2, CO6 | Explain in detail about the chemistry, dietary sources, daily requirements, & biochemical functions of Vitamin B-12 (Cobalamin) | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | Written/viva | F & S | II | |
| CO5 | Describe the Disorders related to Vitamin B-12 (Cobalamin) | Cognitive/comprehensions | MK | K | Lecture/ discussion | Written/viva | F & S | II | |
| CO5, CO7 | Demonstrate common causes of deficiencies, Good food habits, healthy cooking tips to prevent | Psychomotor | NK | S | PBL/ activity learning | Written/viva | F & S | II | |

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| | deficiencies. | | | | | | | | |
| **Topic 7- *Istihala* (Metabolism)** (Lecture:- **17** hours, Non lecture **11** hours) | | | | | | | | | |
| CO1<br>CO2<br>CO3 | Describe the introduction of Istihala (metabolism) & its types | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain Istihala Qa'idi (BMR), SDA, RQ, ATP, calorific value. | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe in detail about the Istihala of Nishasta (metabolism of carbohydrate) | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe in detail about the Glycolysis | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain in detail about the pyruvate dehydrogenase complex & its reactions | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe in detail about the Citric acid cycle | Cognitive/comprehensions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain about the Gluconeogenesis | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |

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| CO1<br>CO2<br>CO3 | Explain about the Glycogenesis | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe the Glycogenolysis | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe the Hexose Monophosphate Shunt | Cognitive/comprehensions | MK | Kh | Small group discussion/PBL | Written/viva | F & S | III | |
| CO4<br>CO5 | Describe the disorders related to carbohydrate metabolism | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe in detail about the Istihala of Shahmiyat (Metabolism of Lipids) | Cognitive/comprehensions | MK | Kh | Lecture, problem based learning | Written/viva | F & S | III | |
| CO2,<br>CO4,<br>CO8 | Explain Beta oxidation | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S, | III | |
| CO1<br>CO2<br>CO3 | Describe the Triglycerols and body lipids | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain the mobilisation of fats from adipose tissues | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe the fate of glycerol & fatty acid | Cognitive/comprehens | NK | Kh | Lecture/discussion | Written/viva | F & S | III | |

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| | | ions | | | | | | | |
| CO1<br>CO2<br>CO3 | Explain in detail about the Fatty acid oxidation | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe the ketone bodies & ketogenesis | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3<br>CO5 | Describe the utilization & overproduction of ketone bodies | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO4<br>CO5 | Describe in detail about the ketonaemia, ketonuria, ketosis & ketoacidosis | Cognitive/comprehensions | MK | Kh | Lecture/Tutorial | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain in detail about the biosynthesis of fatty acids | Cognitive/comprehensions | DK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3<br>CO5 | Explain in detail about the synthesis & degradation of cholesterol | Cognitive/comprehensions | NK | Kh | Lecture | Written/viva | F & S | III | |
| CO5 | Describe the disorders of cholesterol | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Explain in detail about the Lipoproteins and its classification | Cognitive/comprehensions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO5 | Describe the | Cognitive/c | | Kh | Lecture/discussion | Viva voce | | III | |

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| | disorders of plasma lipoproteins | omprehens ions | DK | | | | F & S | | |
| CO1 CO2 CO3 | Describe the lipotropic factors | Cognitive/c omprehens ions | NK | Kh | Lecture | Written/viva | F & S | III | |
| CO4 CO5 CO6 | Describe the siman-i-mufrat (obesity) & muasshir kullatul jism (BMI) | Cognitive/c omprehens ions | MK | Kh | Lecture | Written/viva | F & S | III | |
| CO4 CO5 | Describe the atherosclerosis & its association with cholesterol and lipoproteins | Cognitive/c omprehens ions | DK | K | Lecture | Written/viva | F & S | III | |
| CO1 CO2 CO3 | Describe in detail about the Istihala-e- Humooze Shorain (Metabolism of amino acids) | Cognitive/c omprehens ions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO1 CO2 CO3 | Describe about the proteins & amino acid pool | Cognitive/c omprehens ions | DK | Kh | Lecture | Written/viva | F & S | III | |
| CO1 CO2 CO3 | Explain in detail about the Transamination | Cognitive/c omprehens ions | MK | Kh | Lecture/Tutorial | Written/viva | F & S | III | |
| CO1 CO2 CO3 | Explain in detail about the Deamination | Cognitive/c omprehens ions | MK | Kh | Lecture/discussion | Written/viva | F & S | III | |
| CO1 | Describe in detail | Cognitive/c | | Kh | | Written/viva | | III | |

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| CO2<br>CO3 | about metabolism of ammonia | omprehens ions | MK | | Lecture/discussion | | F & S | | |
| CO1<br>CO2<br>CO3 | Describe in detail about the Urea cycle | Cognitive/c omprehens ions | MK | Kh | Lecture/symposium | Written/viva | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe about the blood urea & its importance | Cognitive/c omprehens ions | DK | Kh | Lecture | Viva voce | F & S | III | |
| CO1<br>CO2<br>CO3 | Describe istihala-e-Madniyat aur istihala-e-ma'a (mineral and water metabolism). | Cognitive/c omprehens ions | DK | Kh | Lecture | Written/viva | F & S | III | |

**Table 3: Learning objectives of Manafeul Aza UNIUG-MZ - Paper – II (Theory)**

| **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 to know** | **E3 Level Does/shows / Knows how/ Knows** | **F3 T-L method** | **G3 Assessment** | **H3 Formative /summative** | **I3 Term** | **J3 Integration** |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1-Nizam-i-Hazm( Digestive system)** (Lecture:- **17** hours, Non lecture **07**hours) | | | | | | | | | |
| CO8 | Describe Tamheed-e-nizam-e-hazm (introduction of digestive system), | Cognitive/c omprehens ions | MK | Kh | Lecture | written/ viva voce | F | I | |
| CO2 | Explain Functional | Cognitive/c | MK | Kh | Lecture/ Video Clip | written/ viva | F & S | I | |

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| | anatomy of primary digestive organs | omprehens ions | | | | voce | | | |
| CO2 | Describe Functional anatomy of oesophagus | Cognitive/c omprehens ions | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of stomach | Cognitive/c omprehens ions | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of small intestines, | Cognitive/c omprehens ions | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of large intestines | Cognitive/c omprehens ions | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of secondary digestive organs -salivary glands,) | Cognitive/c omprehens ions | MK | Kh | Lecture/ Educational Videos/ concept map | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of teeth, | Cognitive/c omprehens ions | DK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of liver, | Cognitive/c omprehens ions | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of gall bladder, | Cognitive/c omprehens ions | DK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |
| CO2 | Describe Functional anatomy of pancreas | Cognitive/c omprehens | MK | Kh | Lecture/ displaying photos on ppt | written/ viva voce | F & S | I | |

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| | | ions | | | | | | | |
| CO2,CO 8, CO9 | Demonstrate Ghudood-e-luabiya ki Khurd beeni saqht (histology of salivary glands), | Psychomotor | MK | S | Demonstration/microscopy/practical | written/ viva voce | F & S | I | |
| CO2 | Explain Luab-e-dahan ki Khususiyat aur tarkeeb (characteristics & composition of saliva) | Cognitive/comprehensions | MK | Kh | Lecture, | written/ viva voce | F & S | I | |
| CO3 | Describe Luab-e-dahan ke tarashshoh ki tanzeem aur afaal (regulation of secretion of saliva and functions), | Cognitive/comprehensions | MK | Kh | Lecture/ concept map | written/ viva voce | F & S | I | |
| CO4 | Explain Luab-e-dahan ki itlaqi ehmiyat (applied physiology of saliva) | Cognitive/comprehensions | MK | Kh | Lecture/Tutorial | written/ viva voce | F & S | I | |
| CO2, CO8, CO9 | Demonstrate Ghudood-e-meddi ki khurd beeni saqht (histology of gastric glands), | Psychomotor | NK | S | Demonstration/ practical/ lecture, | written/ viva voce | F & S | I | |
| CO2 | Describe Rutubat-e-medi ki khususiyat aur tarkeeb | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |

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| | (characteristics & composition of gastric juice) | | | | | | | | |
| CO3 | Explain Rutubat-e-medi ke tarashshoh ki tanzeem aur afaal (regulation of secretion and functions of gastric juice), | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |
| CO4 | Describe Rutubat-e-medi ki itlaqi ehmiyat (applied physiology of gastric juice) | Cognitive/comprehensions | NK | Kh | Lecture | written/ viva voce | F & S | I | |
| CO2 | Demonstrate Banqiras ki Khurd beeni saqht (histology of pancreas), | Psychomotor | MK | S | Demonstration/ practical/ lecture, Display of photos of histological slides | written/ viva voce | F & S | I | |
| CO2 | Describe Rutubat-e-banqras ki Khususiyat aur tarkeeb (characteristics & composition of pancreatic juice) | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |
| CO3 | Explain Rutubat-e-banqiras ke tarashshoh ki tanzeem aur afaal (regulation of secretion and | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |

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| | functions of pancreatic juice), | | | | | | | | |
| CO4 | Describe Rutubat-e-banqiras ki itlaqi ahmiyat (applied physiology of pancreatic juice) | Cognitive/comprehensions | MK | Kh | Lecture/ small group teaching | written/ viva voce | F & S | I | |
| CO2 | Describe Rutubat-e-safravi ki khususiyat aur tarkeeb (characteristics & composition of bile) | Cognitive/comprehensions | MK | Kh | Small group discussion | written/ viva voce | F & S | I | |
| CO2 | Explain Rutubat-e-safravi ke tarashshoh ki tanzeem aur afaal (regulation of secretion and functions of bile), | Cognitive/comprehensions | MK | Kh | Lecture/ concept map | written/ viva voce | F & S | I | |
| CO3 | Describe Rutubat-e-safravi ki itlaqi ahmiyat (applied physiology of bile) | Cognitive/comprehensions | MK | Kh | Self-study/ lecture | written/ viva voce | F & S | I | |
| CO4 | Explain Rutubat-e-mayvi ki tarkeeb, tarassho aur afaal (composition, regulation of secretion and functions of succus entericus) | Cognitive/comprehensions | MK | Kh | Lecture/ small group teachings | written/ viva voce | F & S | I | |
| CO2, CO3, | Describe Majra-e-ghizai ki harkat | Cognitive/comprehens | MK | Kh | Lecture/ Educational Video | written/ viva voce | F & S, | I | |

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| CO4, CO8 | (movements of alimentary canal) – mastication: definition, Muscles of mastication, mechanism, benefits of prolong chewing & applied physiology. | ions | | | | | | | |
| CO2, CO3, CO4, CO8 | Explain Amal-i-izdrad (Deglutition: definition, phases & applied physiology, safe deglutition tips) | Cognitive/comprehensions | MK | Kh | Lecture Display of animation video clips, | written/ viva voce | F & S, | I | |
| CO2, CO3, CO4, CO8 | Describe Movements of oesophagus & their applied physiology | Cognitive/comprehensions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S, | I | |
| CO2, CO3, CO4, CO8 | Describe Movements of stomach & their applied physiology | Cognitive/comprehensions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S, | I | |
| CO2, CO3, CO4, CO8 | Describe Qai (Vomiting): definition, causes, types series of events during vomiting, home management tips | Cognitive/comprehensions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S, | I | |
| CO2, CO3, | Explain Movements of small intestines | Cognitive/comprehens | MK | Kh | Lecture, display of animation video | written/ viva voce | F & S | I | |

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| CO4, CO8 | & their applied physiology | ions | | | clips | | | | |
| CO2, CO3, CO4, CO8 | Describe Movements of colon & their applied physiology | Cognitive/comprehensions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S, Questionnaire | I | |
| CO2, CO3, CO4, CO8 | Explain Fuzla ka banna aur iqhraj (formation of faeces and defecation), | Cognitive/comprehensions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S | I | |
| CO2 | Describe Nishashta ka hazm aur injezab (digestion & absorption of carbohydrates), | Cognitive/comprehensions | MK | Kh | Lecture/ small group discussion | written/ viva voce | F & S | I | |
| CO2 | Describe Shorain ka hazm aur injezab (digestion & absorption of proteins) | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | written/ viva voce | F & S | I | |
| CO2 | Describe Sheham ka hazm aur injezab (digestion & absorption of lipids) | Cognitive/comprehensions | MK | Kh | Lecture/symposium | written/ viva voce | F & S | I | |
| CO2 | Describe Paani ka injezab (absorption of water). | Cognitive/comprehensions | MK | Kh | Lecture/project work | written/ viva voce | F & S | I | |
| **Topic 2- Nizam-e-Tanaffuss (Respiratory System)** (Lecture:- **16** hours, Non lecture **11** hours) | | | | | | | | | |
| CO8 | Describe Mukhtalif tanaffussi aaza ki | Cognitive/c | MK | Kh | Lecture | written/ viva voce | F & S | I | |

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| | tamheed (introduction of respiratory system/organs) | omprehens ions | | | | | | | |
| CO2 | Describe and Demonstrate Azlaat-e-tanaffuss ki Khurd beeni sakht aur unke afaal (histological structure & functions of respiratory muscles), | psychomotor | MK | S | Demonstration, Display of histological slides | written/ viva voce | F & S | I | |
| CO2 | Explain Tanaffus ka meekaniyah (mechanism of breathing) | Cognitive/c omprehens ions | MK | Kh | Video clips | written/ viva voce | F & S | I | |
| CO2, CO3 | Demonstrate Oxygen aur carbon di oxide ki muntaqeeli (transport of oxygen & carbon dioxide), | Cognitive/c omprehens ions | MK | Kh | Lecture, display of animation video clips | written/ viva voce | F & S | I | |
| CO2, CO3 | Describe Riya aur insaja may gason ka tabadila (gaseous exchange in lungs and tissues), | Cognitive/c omprehens ions | MK | Kh | Lecture, Display of animation video clips | written/ viva voce | F & S | I | |
| CO2 | Explain Tanaffuss ke marakiz (centers of respiration), | Cognitive/c omprehens ions | MK | Kh | Lecture | written/ viva voce | F & S | I | |

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| CO2, CO4 | Demonstrate Masnooi tanaffuss aur inke muqhtalif tareeqe (artificial respiration and its methods), | Psychomotor | MK | S | Demonstrate/ lecture, Display of video clips, simulation | written/ viva voce | F & S | I | |
| CO2 | Describe Ahjame-e-reviyyah/ Jasamat-e-reviya (pulmonary volume), | Cognitive/comprehensions | MK | Kh | Lecture/ concept map | written/ viva voce | F & S | I | |
| CO2 | Explain Waqaat-e-reviya (pulmonary capacities) | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |
| CO2, CO4, CO5 | Describe Usre tanaffuss (dyspnoea), definition, causes, types, clinical presentation | Cognitive/comprehensions | MK | Kh | Lecture, Simulation | written/ viva voce | F & S | I | |
| CO2, CO4, CO5 | Describe Qillat-e-baad (anoxia) | Cognitive/comprehensions | MK | Kh | Lecture | written/ viva voce | F & S | I | |
| CO2, CO4, CO5 | Describe Dushwaar-e-tanaffuss (apnoea) | Cognitive/comprehensions | MK | Kh | Lecture/Symposium | written/ viva voce | F & S | I | |
| CO2, CO4, CO5 | Describe Izdiyad-e-tanaffuss (hypercapnia) | Cognitive/comprehensions | MK | Kh | Lecture/small group teachings | written/ viva voce | F & S | I | |
| CO2, CO4, CO5 | Explain Sathe-murtafa aur gehre paani ke feliyati | Cognitive/comprehens | MK | Kh | Lecture/ Tutorial | written/ viva voce/project work | F & S | I | |

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| | asraat (physiological effect of high altitude & under water). | ions | | | | | | | |
| **Topic 3- Nizam-e-Ikhraj ( Excretory system)** (Lecture:- **14** hours, Non lecture **11**hours) | | | | | | | | | |
| CO2 | Describe the structure and function of kulliya (kidney) | Cognitive/comprehensions | MK | KH | Lecture | Written/Viva | F&S | II | |
| CO2, CO3 | Explain the non-excretory functions of kidney | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| C02 | Describe the structure and function of (kulvi ikai) nephron | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO3 | Describe the kulliyavi doran-e-khoon (renal circulation) | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO6, CO7 | Enumerate the steps to measure renal blood flow. | Cognitive/Recall | NK | K | Small group teaching | Written/viva | F&S | II | |
| CO2 | Describe the structure and function of aljihazul mujawiru lilkubaiba (Juxta glomerulus apparatus) | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |

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| CO2, CO3 | Explain the renin-angiotensin system | Cognitive/comprehensions | MK | KH | Lecture/small group teaching | Written/viva | F&S | II | |
| CO2, CO4 | Describe the mechanism of paidish-e- bowl (urine formation involving processes of Filtration, tubular reabsorption and secretion. | Cognitive/comprehensions | MK | KH | Lecture/symposium | Written/viva | F&S | II | |
| CO2 | Explain the counter- current mechanism of urine concentration. | Cognitive/comprehensions | MK | Kh | Small group teaching | Written/viva | F&S | II | |
| CO4, CO6 | Define & describe shrah at tarsheehul kubabibi (glomerular filtration rate) & factors affecting GFR | Cognitive/comprehensions | DK | Kh | Lecture | Written/viva | F&S | II | |
| CO2 | EXPLAIN the tubular reabsorption process and process of tubular secretion. | Cognitive/comprehensions | MK | Kh | Lecture/video clips | Written/viva | F&S | II | |
| CO2, CO3 | Explain renal clearance mechanisms | Cognitive/comprehensions | NK | Kh | Small group discussion/PBL | Written/viva | F&S | II | |

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| CO2, CO6 | Describe the methods to measure GFR, and other clearance tests | Cognitive/comprehensions | MK | Kh | Small group teaching | Written/viva | F&S | II | |
| CO1, CO4 | Describe renal Regulation of fluid and electrolytes | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO1, CO2, CO3 | Describe the role of kidney in maintaining body temperature | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO3 | Explain physiology of micturition and its abnormalities | Cognitive/comprehensions | MK | Kh | Small group teaching | Written/viva | F&S | II | |
| CO4, CO6 | Bowl ka radde-amal aur wazn-e-makhsoos (reaction and specific gravity of urine), | Cognitive/comprehensions | MK | Kh | Lecture/ small group teachings | Written/ viva voce | F & S | II | |
| CO6, CO7 | Describe cystometry and urogram | Cognitive/comprehensions | NK | Kh | Small group discussion/PBL | Written/viva | F&S | II | |
| CO4 | Describe urinary bladder dysfunctions | Cognitive/comprehensions | NK | Kh | Small group discussion/PBL | Written/viva | F&S | II | |
| CO4 | Explain the mechanism of action of diuretics | Cognitive/comprehensions | NK | Kh | Lecture | Written/viva | F&S | II | |
| CO4 | Describe artificial kidney, and renal | Cognitive/comprehens | NK | Kh | Self-directed learning | Written/viva | F&S | II | |

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| | transplantation. | ions | | | | | | | |
| CO4 | List the indications and need of renal transplantation | Cognitive/Recall | NK | K | Symposium | Written/viva | F&S | II | |
| CO4 | List the indications of dialysis. | Cognitive/Recall | DK | K | Symposium | Written/viva | F&S | II | |
| CO4 | Describe and discuss advantages & complications of renal transplantation.. | Cognitive/comprehensions | NK | Kh | Self-study | Written/viva | F&S | II | |
| CO6, CO7 | Enumerate & describe the renal function tests | Cognitive/Recall | MK | K | Lecture/ concept map | Written/viva | F&S | II | |
| CO6, CO7 | Interpret & analyze RFT | Cognitive/Analysis | DK | Kh | Lecture/PBL | Written/viva | F&S | II | |
| CO2, CO3 | Describe unani concept of istifragh-e-tabayi | Cognitive/comprehensions | MK | KH | Tutorials/small group discussion | Written/viva | F | II | |
| CO2, CO3 | Describe unani concept of idrar-e-bowl. | Cognitive/comprehensions | MK | KH | Tutorials/small group discussion | Written/viva | F | II | |
| CO2, CO3 | Describe unani concept of ihtibas-e-bowl | Cognitive/comprehensions | MK | KH | Tutorials/small group discussion | Written/viva | F | II | |
| **Topic 4- Nizam-ie-Jild ( Integumentary system)** (Lecture:- **04** hours, Non lecture **02** hours) | | | | | | | | | |
| CO2 | Describe Jild ki saqht aur afaal (structure and | Cognitive/comprehensions | MK | Kh | Lecture, display of histological slides | Written/ viva voce | F & S | II | |

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| | functions of skin) [integument], | | | | | | | | |
| CO2, CO4, | Explain Arq (sweat) | Cognitive/comprehensions | MK | Kh | Lecture | Written/ viva voce | F & S | II | |
| CO2, CO3 CO4 | Describe Hararat-e-badaniya ke tavazun mein jild ka kirdar (role of skin in regulation of body temperature) | Cognitive/comprehensions | MK | Kh | Lecture/ symposium | Written/ viva voce | F & S | II | |
| CO2, CO3, CO4, CO5 | Describe Ghair tabiyyee hararat aur qillate-hararat (abnormal and sub-normal temperature). | Cognitive/comprehensions | MK | Kh | Lecture/ PBL | Written/ viva voce | F & S | II | |
| **Topic 5- *Nizam-e-Asab* ( Nervous system)** (Lecture:- **19** hours, Non lecture **11** hours) | | | | | | | | | |
| CO2, CO3 | Describe the functional anatomy and physiological properties of the nerves | Cognitive/comprehensions | MK | Kh | Lecture/self-directed learning | Written/viva | S | II | |
| CO2, CO3 | Describe organization of the nervous | Cognitive/comprehensions | MK | Kh | Lecture / concept map | Written/viva | S | II | |

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| | system into central NS, peripheral NS, somatic NS & autonomic NS. | | | | | | | | |
| CO2, CO3 | Describe and define action potentials in nervous system | Cognitive/comprehensions | MK | KH | Lecture/ video clip | Written/viva | F &S | II | |
| CO2, CO 3, CO 4 | List the factors affecting conduction velocity in a nerve. | Cognitive/Recall | NK | K | Lecture | Written/viva | S | II | |
| CO2, CO 3 | Outline the cell types present in the nervous system | Cognitive/comprehensions | MK | Kh | Lecture /Project work | Written/viva | F&S | II | |
| CO2, CO 3 | Describe structural and functional morphology of neurons | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe the different types | Cognitive/comprehensions | MK | Kh | Project work | Written/viva | F&S | II | |

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| | of neurons and neuroglia | | | | | | | | |
| CO2, CO 3 | Differentiate between myelinated and non-myelinated neurons and between white matter and grey matter. | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Define and describe the terms 'nuclei' and 'ganglia' | Cognitive/Recall | MK | K | Lecture | Written/viva | S | II | |
| CO2, CO 3 | Define the term nerve fibres and state the types of fibres | Cognitive/Recall | MK | K | LECTURE / tutorial | Written/viva | F&S | II | |
| CO2, CO 3 | Outline the types of fibres in a mixed peripheral nerve. | Cognitive/Recall | MK | K | LECTURE/concept map | Written/viva | F&S | II | |
| CO2, CO 3 | Define the term mashbak/ittisal (synapse) | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |

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| CO2, CO 3 | Differentiate between electrical & chemical synapse | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO4 | Describe chemical synapse transmission | Cognitive/comprehensions | MK | KH | LECTURE/ video clip | Written/viva | S | II | |
| CO2, CO 3 | Define the term asabi mursalat (neurotransmitters) | Cognitive/Recall | MK | K | Lecture | Written/viva | F | II | |
| CO2, CO 3 | Outline and classify the various neurotransmitters | Cognitive/comprehensions | DK | Kh | Self-directed learning | Written/viva | F | II | |
| CO2, CO 3, | Describe functioning of neurotransmitters | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe organization and functional anatomy of CNS | Cognitive/comprehensions | MK | Kh | LECTURE/ concept map | Written/viva | F&S | II | |
| CO2, CO 3 | Describe | Cognitive/comprehens | MK | Kh | Lecture | Written/viva | F&S | II | |

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| | functions of CNS | ions | | | | | | | |
| CO2, CO 3 | Explain integrative functions of CNS and levels of CNS | Cognitive/comprehensions | MK | Kh | LECTURE/Role play | Written/viva | F&S | | |
| CO2, CO 3 | Define & classify sensations | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe sensory modalities | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | List the sensory receptor for each modality of sensation | Cognitive/Recall | MK | K | Lecture/Project work | Written/viva | F&S | II | |
| CO2, CO 3 | Describe pain and temperature receptors | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe touch receptors | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe receptors for proprioception | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe sensory pathways for Transmitting somatic signals. | Cognitive/comprehensions | MK | Kh | Lecture/concept map | Written/viva | F&S | II | |

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| CO2, CO 3, | Describe ascending and descending tracts | Cognitive/Recall | MK | K | Lecture/concept map | Written/viva | F&S | II | |
| CO2, CO 3, | Describe the organizations of the motor system. | Cognitive/Recall | MK | KH | Lecture/tutorials | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Define & describe UMN & LMN LEISIONS | Cognitive | MK | KH | Lecture/PBL | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Define and classify the term 'reflex' | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Illustrate the components of a reflex arc diagrammatically | Cognitive/Recall | MK | KH | Lecture/concept map | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe in detail, the physiological significance of reflexes | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Describe organization and | Cognitive/comprehensions | NK | K | Lecture | Written/viva | F&S | II | |

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| | the functional anatomy of cerebellum | | | | | | | | |
| CO2, CO 3, | Describe functions of cerebellum | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Define the term basal ganglia. | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Outline the forming elements of the basal ganglia | Cognitive/comprehensions | MK | Kh | Lecture/Project work | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Explain the physiological role and significance of basal ganglia. | Cognitive/comprehensions | MK | KH | LECTURE/symposium | Written/viva | F&S | II | |
| CO2, CO 3, | Define the autonomic nervous system | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Describe classification of the autonomic nervous system | Cognitive/comprehensions | MK | Kh | LECTURE/concept map | Written/viva | F&S | II | |

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| CO2, CO 3, | Outline the functions of the autonomic nervous system | Cognitive/comprehensions | MK | Kh | Lecture/Project work | Written/viva | F&S | II | |
| CO2, CO 3, | Differentiate between sympathetic and para sympathetic nervous system | Cognitive/comprehensions | MK | Kh | LECTURE/Role play | Written/viva | F&S | II | |
| CO2, CO 3, | Describe physiological anatomy of spinal cord | Cognitive/comprehensions | MK | Kh | Self-directed learning/ lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Describe spinal nerves and nerve roots | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Describe arrangements of white and grey matter in spinal cord | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe CSF, and its composition | Cognitive/comprehensions | MK | Kh | Lecture/Project work | Written/viva | F&S | II | |

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| CO2, CO 3, CO 4 | Describe characteristics and functions of CSF | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4, CO 5 | Outline the factors controlling the formation and circulation of CSF | Cognitive/Recall | DK | K | Lecture/small group teachings | Written/viva | F&S | II | |
| CO2, CO 3 | Define and classify sleep | Cognitive/Recall | DK | K | Self-study | Written/viva | F&S | II | |
| CO2, CO 3 | Describe physiological changes during sleep | Cognitive/comprehensions | NK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Explain stages of sleep | Cognitive/comprehensions | DK | KH | LECTURE/Small group teaching | Written/viva | F&S | II | |
| CO2, CO 3 | Define and classify pain | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4, CO 5 | Describe pathways and mechanism of pain | Cognitive/comprehensions | MK | KH | LECTURE/concept map | Written/viva | F&S | II | |
| CO2, | Describe | Cognitive/c | MK | KH | Self directed | Written/viva | F&S | II | |

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| CO 3, CO 4 | quwwat-e-nafsanniyah | omprehensions | | | learning | | | | |
| CO2, CO 3, CO 4 | Describe hawas-e-khamsa zahira wa batina | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO9 | Describe & demonstrate EEG | Psychomotor | MK | S | Lecture/demontration | Written/viva | F&S | II | |
| CO9 | Outline the main clinical uses of EEG | Cognitive/Recall | NK | K | Lecture/ Project work | Written/viva | F&S | II | |
| CO2, CO 3, CO 6, CO 9 | Elicit various superficial and deep reflexes and indicate their significance. | Psychomotor | MK | S | LECTURE/demonstration | Written/viva | F&S | II | |
| CO2, CO 3 | Describe the structure and functions of taste buds | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Outline location of taste buds and mechanism of | Cognitive/comprehensions | MK | KH | Lecture/small group discussion | Written/viva | F&S | II | |

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| | stimulation of taste bud | | | | | | | | |
| CO2, CO 3 | Describe pathways for taste transmission | Cognitive/comprehensions | MK | KH | LECTURE/concept map | Written/viva | F&S | II | |
| CO2, CO 3 | Define primary taste sensations and describe taste transduction | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Outline the taste receptors | Cognitive/Recall | MK | K | Lecture/ Project work | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe olfactory receptors and mechanism of excitation of the olfactory cells | Cognitive/comprehensions | MK | KH | Lecture/tutorials | Written/viva | F&S | II | |
| CO2, CO 3, | Describe olfactory pathways and transmission. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, | Explain olfactory transduction | Cognitive/comprehens | MK | KH | Lecture | Written/viva | F&S | II | |

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| CO2, CO 3, | Describe rapid adaptation of olfactory sensations | Cognitive/comprehensions | MK | KH | LECTURE/ small group teaching | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Explain threshold for olfactory sensations | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 5 | Outline the pathophysiology of altered taste and smell | Cognitive/Recall | NK | K | Lecture/Project work | Written/viva | F&S | II | |
| CO2, CO 3 | Describe and discuss functional anatomy of ear | Cognitive/comprehensions | MK | Kh | LECTURE/ video clip | Written/viva | F&S | II | |
| CO2, CO 3 | Describe tympanic membrane and the Ossicular system | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Explain conduction of sound from the | Cognitive/comprehensions | MK | Kh | LECTURE/ video clip | Written/viva | F&S | II | |

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| | Tympanic membrane to the cochlea | | | | | | | | |
| CO2, CO 3 | Describe transmission of sound through Bone | Cognitive/comprehensions | MK | KH | LECTURE/ video clip | Written/viva | F&S | II | |
| CO2, CO 3 | Describe functional anatomy of the Cochlea | Cognitive | MK | Kh | LECTURE/ video clip | Written/viva | F&S | II | |
| CO2, CO 3 | Explain transmission of sound waves in The cochlea | Cognitive/comprehensions | MK | KH | LECTURE/symposium | Written/viva | F&S | II | |
| CO2, CO 3 | Describe function of the organ of corti | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe determination of sound Frequency | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | F&S | II | |
| CO2 | Describe brief physics of sound and concept of | Cognitive/comprehensions | NK | KH | Self-directed learning/ lecture | Written/viva | F&S | II | |

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| | the decibel scale | | | | | | | | |
| CO2, CO 7 | Describe threshold for hearing sound, and list it for different Frequencies | Cognitive/comprehensions | NK | KH | Self-directed learning/ lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe auditory nervous pathways and their mode of functioning | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Explain functions of the cerebral cortex in Hearing | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Explain determination of the direction From which sound comes and neural mechanisms for detecting sound direction | Cognitive/comprehensions | MK | KH | LECTURE/Role play | Written/viva | F&S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| CO2, CO 3, CO 4, CO 5 | Outline pathophysiology of deafness | Cognitive/Recall | MK | KH | Lecture/Project work | Written/viva | F&S | II | |
| CO2, CO 7 | Outline & describe various tests of hearing | Cognitive/Recall | MK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe the physiological anatomy of the eye and its accessory Structures | Cognitive/Recall | MK | K | LECTURE/video clip | Written/viva | F&S | II | |
| CO2, CO 3 | Describe anatomy and function of the retina | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Explain the formation of image on the retina | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Explain mechanism of “accommodation “and its significance in | Cognitive/comprehensions | MK | Kh | LECTURE/video clip | Written/viva | F&S | II | |

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| | eye optics | | | | | | | | |
| CO2, CO 3, CO 9, CO 10 | Describe visual acuity | Cognitive/comprehensions | MK | Kh | LECTURE / demonstration | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe and classify Intraocular fluids | Cognitive | MK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Explain formation and outflow of aqueous humour | Cognitive/comprehensions | DK | KH | LECTURE/video clip | Written/viva | F&S | II | |
| CO2, CO 3, CO 6 | Define intraocular pressure and describe its physiological and clinical significance | Cognitive/Recall | MK | K | LECTURE/Small group teaching | Written/viva | F&S | II | |
| CO2, CO 3 | Describe photoreceptors and photochemistry of vision | Cognitive/comprehensions | MK | KH | LECTURE/Small group teaching | Written/viva | F&S | II | |
| CO2, CO 3 | Define rhodopsin- | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | II | |

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| | retinal Visual cycle and mechanism of Excitation of the rods | | | | | | | | |
| CO2, CO 3 | Describe colour vision and role of Cones | Cognitive/comprehensions | MK | KH | Lecture/pbl | Written/viva | F&S | II | |
| CO2, CO 3 | Explain mechanics of colour detection | Cognitive/comprehensions | DK | KH | Student teaching | Written/viva | F&S | II | |
| CO2, CO 3 | Describe light and dark Adaptation | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | F&S | II | |
| CO2, CO 3 | Describe visual pathways | Cognitive/comprehensions | MK | K | LECTURE/concept map | Written/viva | F&S | II | |
| CO2, CO 3 | Describe organization and function of the Visual cortex | Cognitive/comprehensions | NK | K | Lecture | Written/viva | F&S | II | |
| CO2, CO 3, CO 4 | Describe eye movements and their muscular and neural control | Cognitive/comprehensions | DK | KH | LECTURE/video clip | Written/viva | F&S | II | |

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| CO2, CO3, CO4 | Explain fusion of the visual images from The two eyes | Cognitive/comprehensions | DK | KH | Self-study | Written/viva | F&S | II | |
| CO4, CO5 | Define hyperopia, myopia, astigmatism, presbyopia, and strabismus | Cognitive/Recall | MK | K | Lecture/PBL | Written/viva | F&S | II | |
| CO2, CO4, CO5 | Describe and discuss the physiological basis of lesion in visual pathway | Cognitive/Recall | MK | K | Lecture/PBL | Written/viva | F&S | II | |
| CO4, CO5 | DESCRIBE in detail the errors of refraction and outline the ways to correct refractive errors of eye | Cognitive/Application | MK | KH | Lecture/Project Work | Written/viva | F&S | II | |
| CO9 | Demonstrate steps to test | Cognitive/ Psychomot | MK | S | Demonstration | Written/viva | F&S | II | |

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| | distant and near vision | or | | | | | | | |
| CO9 | Outline the tests of colour vision | Cognitive/Recall | MK | K | Lecture/demonstration | Written/viva | F&S | II | |
| **Topic 6- *Nizam-e-Ghudood-e-la Qanatiyah* (Endocrine system)** (Lecture:- **19** hours, Non lecture **10**hours) | | | | | | | | | |
| CO2 | Describe ghudood-e-la qanatiyah endocrine glands) | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | III | |
| CO2 | Define rasilat (hormones)& Classify the hormones based on their chemical nature | Cognitive/Recall | MK | K | Self-directed learning | Written/viva | F&S | III | |
| CO2 | Discuss & describe synthesis of hormones | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO3, CO 4 | Describe the general properties of rasilat. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO7 | Describe radioimmunoassay | Cognitive/comprehensions | NK | KH | Lecture/video clip | Viva | F&S | III | |
| CO3, CO 4 | Explain the mechanism of action of hormones. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |

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| CO3, CO 4 | Describe cAMP second messenger system. | Cognitive/comprehensions | MK | KH | Lecture / concept map | Written/viva | F&S | III | |
| CO2 | Describe the calcium metabolism and physiology of bone | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2 | Discuss the hormones for calcium metabolism, their secretion and regulation | Cognitive/comprehensions | MK | KH | Lecture /seminar | Written/viva | F&S | III | |
| CO2, CO 3 | Describe the jar-i-darqin (parathormone) and its functioning In calcium metabolism | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| C02, CO 3 | Discuss the physiological anatomy of taht-us-sarir (hypothalamus) | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2 | Enumerate the hormones released from Hypothalamus & discuss their roles | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | III | |
| CO2, CO 3 | Describe the functional anatomy | Cognitive/comprehens | MK | Kh | Lecture | Written/viva | F&S | III | |

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| | of ghudda nukhamiyah (pituitary), | ions | | | | | | | |
| CO2, CO3 | List the hormones secreted from ghudda nukhamiyah muqaddam (anterior pituitary) & discuss their functions. | Cognitive/Recall | MK | K/KH | Small group discussion/lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the synthesis & REGULATION of the rasila-i-namu (growth hormone ) | Cognitive/comprehensions | MK | KH | Small group teaching | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the physiological Functions of the growth hormone | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | S | III | |
| CO2, CO 3, CO 4 | Describe abnormalities of Growth hormone secretions | Cognitive/comprehensions | MK | KH | Lecture/video clip | Written/viva | S | III | |
| CO2, CO 3 | Describe the physiological anatomy of posterior Pituitary. | Cognitive/comprehensions | MK | Kh | Self-directed learning | Written/viva | F | III | |
| CO2, CO 3 | List the hormones released from posterior pituitary. | Cognitive/Recall | MK | K | Lecture | Written/viva | F& S | III | |
| CO2, CO 3, | Outline the synthesis, | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | III | |

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| CO 4 | Regulation and actions of ADH | | | | | | | | |
| CO4 | Discuss the disorders of ADH secretion | Cognitive/comprehensions | DK | KH | Lecture/ symposium | Written/viva | S | III | |
| CO4 | Explain syndrome of inappropriate hyper-secretion of anti-diuretic hormone (SIADH) | Cognitive/comprehensions | DK | KH | Lecture | Written/viva | S | III | |
| CO2, CO 3, CO 4 | Outline the synthesis, Regulation and actions of Oxytocin | Cognitive/Recall | MK | K | Small group teaching | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe functional anatomy of ghudda-e darqiyyah | Cognitive/comprehensions | MK | Kh | Self-directed learning | Written/viva | F | III | |
| CO2, CO 3, CO 4 | Describe the synthesis and secretion of the darqin (Thyroid) metabolic hormones | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe physiological effects of darqin (thyroid hormone) | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Enumerate the signs and symptoms of hyper | Cognitive/Recall | MK | K | Lecture/PBL | Written/viva | F | III | |

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| | & hypo secretions of thyroid hormones | | | | | | | | |
| CO2, CO 3, CO 4 | Describe goitre and discuss its patho-physiology | Cognitive/comprehensions | MK | Kh | Lecture/video clip | Written/viva | F | III | |
| CO2, | Describe the physiological anatomy of ghudda-e-kazriyyah (adrenal cortex and medulla) | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F | III | |
| CO2, CO 3 | Enumerate the hormones released from adrenal cortex | Cognitive/Recall | MK | K | Lecture | Written/viva | F | III | |
| CO2, CO 3 | Describe the functions of the hormones released from adrenal cortex | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F& S | III | |
| CO2, CO 3, CO 4 | Explain in detail the regulation of hormones released from adrenal cortex | Cognitive/comprehensions | DK | Kh | Lecture /Concept Map | Written/viva | S | III | |
| CO4, CO 5 | Explain the disorders of adrenal cortex hormones. | Cognitive/comprehensions | MK | Kh | Lecture/PBL | Written/viva | S | III | |
| CO2, CO 3, CO 4 | Describe the Physiological anatomy of banqiras | Cognitive/comprehensions | MK | Kh | Lecture | Written/viva | F | III | |

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| | (pancreas). | | | | | | | | |
| CO2, CO 3, CO 4 | Outline the endocrine hormones secreted from pancreas | Cognitive/Recall | MK | K | Lecture | Written/viva | F &S | III | |
| CO2, CO 3, CO 4 | Describe the synthesis, regulation and functions of insulin and glucagon | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F &S | III | |
| CO2, CO 3, CO 4 | Discuss the pathophysiology, signs and symptoms of diabetes Mellitus | Cognitive/comprehensions | MK | Kh | Lecture/PBL | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe glucose tolerance test and interpretation of the results | Cognitive/comprehensions | MK | Kh | Lecture/Tutorials | Written/viva | S | III | |
| CO2, CO 3 | Describe the physiological anatomy of Ghudda sa'atariyah (thymus) and ghhudda-e - sanobariyah (pineal | Cognitive/comprehensions | DK | Kh | Symposium | Written/viva | S | III | |

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| | gland) | | | | | | | | |
| CO2, CO 3 | Describe secretions of thymus and pineal gland and their functions | Cognitive/comprehensions | NK | Kh | Tutorials | Written/viva | S | III | |
| CO2, CO 4 | Discuss the physiology of Circadian rhythm | Cognitive/comprehensions | NK | KH | Lecture/small group discussion | Written/viva | S | III | |
| **Topic 7- *Nizam-e-Tauleed* ( Reproductive system)** (Lecture:- **14**hours, Non lecture **10**hours) | | | | | | | | | |
| CO2, CO 3, CO 4 | Describe sex differentiation & determination | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | S | III | |
| CO2, CO 3, CO 4 | Discuss the role of gametes & chromosomes in sex differentiation | Cognitive/comprehensions | MK | KH | Small group discussion | Written/viva | S | III | |
| CO2, CO 3, CO 4 | Describe gonadal differentiation, and psychological differentiation | Cognitive/comprehensions | NK | KH | Small group discussion | Written/viva | S | III | |
| CO2 ,CO 4, CO 5 | Outline chromosomal abnormalities, hormonal abnormalities | Cognitive/Recall | NK | KH | Symposium | Written/viva | S | III | |

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| | and their features (sex-linked) | | | | | | | | |
| CO2, CO 3, CO 4 | Describe and discuss bulooghat (puberty): onset, progression and stages. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Summarize physical & hormonal changes during puberty | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO5 | Outline disorders of puberty | Cognitive/Recall | DK | K | Small group discussion | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the physiological anatomy of nizam-e-tauleed mardana (male reproductive system) | Cognitive/comprehensions | DK | Kh | Lecture | Written/viva | F&S | III | |
| CO2, CO 3 | Describe and Outline the steps | Cognitive/Recall | MK | KH | Lecture/Concept Map | Written/viva | F&S | III | |

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| | involved in spermatogenesis | | | | | | | | |
| CO2, CO 3, CO 4 | Describe the structure of rasilat-i-khusya (testosterone), and describe its synthesis, metabolism, transport and actions. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the regulation of testosterone secretion | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO5 | List & discuss the abnormal conditions like Cryptorchidism , Hypo & hypergonadism | Cognitive/Recall | NK | K | Small group discussion | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the physiological anatomy of ghudda-e-madhi | Cognitive/comprehensions | MK | KH | Self-directed learning | Written/viva | F&S | III | |

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| | (prostate) and seminal vesicles. | | | | | | | | |
| CO2, CO 3, CO 4 | Describe the role of prostate and seminal vesicles in reproduction. | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4, CO 6 | Describe the composition of semen | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the cause, mechanism of erection and ejaculation | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe physiological anatomy of nizam-e-tawleed zanana (female reproductive system) | Cognitive/comprehensions | MK | KH | Lecture/video clip | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the menstrual cycle. | Cognitive/comprehensions | MK | KH | Small group teachings | Written/viva | F&S | III | |
| CO2, | Describe the | Cognitive/c | MK | KH | Lecture/ small | Written/viva | F&S | III | |

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| CO 3, CO 4 | changes that occur during the menstrual cycle. | omprehens ions | | | group teachings | | | | |
| CO2, CO 3, CO 4 | Describe physiological anatomy and functions of ovaries | Cognitive/c omprehens ions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the regulation of ovarian functions | Cognitive/c omprehens ions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Discuss the general structures and functions of rasila muwallid-i-bayda (oestrogen) and rasila mu'in al-haml (progesterone) | Cognitive/c omprehens ions | MK | KH | Lecture/small group discussion | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe ibadha (ovulation). | Cognitive/c omprehens ions | MK | KH | Lecture/video clip | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the baar-aawari (fertilization), | Cognitive/c omprehens ions | MK | KH | Lecture video clip | Written/viva | F&S | III | |

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| | isteqrar-e-hamal (implantation) and placenta formation | | | | | | | | |
| CO2, CO 3, CO 4 | Describe the placenta and its functions | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Enumerate the hormones secreted from placenta and their functions | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe the physical and hormonal changes that accompany pregnancy | Cognitive/comprehensions | MK | KH | Lecture/concept map | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe mechanism and Control of wiladat (parturition) | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe physiologyof ilban/ amal-e- | Cognitive/comprehensions | MK | Kh | Symposium | Written/viva | F&S | III | |

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| | raza'at (lactation) | | | | | | | | |
| CO2, CO 3, CO 4 | Describe functional anatomy of mammary gland | Cognitive/comprehensions | MK | Kh | Small group discussions | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe breast development and milk production. | Cognitive/comprehensions | MK | Kh | Small group Discussion | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Define Iyas (menopause) | Cognitive/Recall | MK | K | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Explain the hormonal Changes and their effects during perimenopause and menopause | Cognitive/comprehensions | MK | KH | Lecture | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Enumerate physiological effects of perimenopause and menopause | Cognitive/Recall | MK | K | Lecture /Project Works | Written/viva | F&S | III | |
| CO2, CO 3, CO 4 | Describe quwwate tanasulliya in | Cognitive/comprehensions | NK | KH | Lecture/small group discussion | Written/viva | S | III | |

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| | general | | | | | | | | |
| CO2, CO 3, CO 4 | Unani concept of tawleed-e-mani wa tawleed-e-aaza | Cognitive/comprehensions | MK | KH | Self-directed learning | Written/viva | S | III | |

**Table 4: Learning objectives of Manafeul Aza UNIUG-MZ (Practical)**

| A4 Course outcome | B4 Learning Objective (At the end of the Practical/ Clinic the Students should be able to) | C4 Domain | D4 Must to know/desire to know/Nice to know | E4 Level Does/shows / Knows how/ Knows | F4 T-L method | G4 Assessment | H4 Formative /summative | I4 Term | J4 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Practical 1- General Physiology** (Non Lecture:- **76** hours) | | | | | | | | | |
| CO9 | Describe & demonstrate Working & usage of stethoscope | Cognitive/Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| CO9 | DESCRIBE & demonstrate the use of Light Microscope | Cognitive/ Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| CO9 | Demonstrate& explain various tissue slides by microscope | Cognitive/Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| CO9 | Measure Body temperature by thermometer. | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva | F&S | I | |
| **Practical 2- Respiratory System** (Non Lecture:- **20** hours) | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|
| CO9 | Describe, record & analyze respiratory sounds | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| CO9 | Describe, Measure, record & analyze the lung volume capacities | Cognitive/Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| **Practical 3- Digestive System** (Non Lecture:- **12** hours) | | | | | | | | | |
| CO9 | Record and analyse Bowel sounds | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| CO9 | Measure BMI | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | I | |
| **Practical 4- Haematology** (Non Lecture:- **70** hours) | | | | | | | | | |
| CO9 | Demonstrate Collection of blood samples | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |
| CO9 | Collect blood serum and plasma | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva | F&S | II | |

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| CO9 | Prepare blood film | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva | F&S | II | |
| CO9 | Identify various blood cells under microscope | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |
| CO9 | Determine Differential Leucocyte Count | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva / Practical Performance | F&S | II | |
| CO9 | Estimate Haemoglobin | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva / Practical Performance | F&S | II | |
| CO9 | Determine Blood Groups | Psychomotor | MK | S | Demonstration/ practical | Written/viva / Practical Performance | F&S | II | |
| CO9 | Determine Bleeding and Clotting time | Psychomotor | MK | S | Demonstration/ practical/ hands on training | Written/viva / Practical Performance | F&S | II | |
| CO9 | Demonstrate Haemocytometry (Diluting pipettes and Neubauer's chamber | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |
| CO9 | Determine total | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |

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| | RBC Count | | | | | | | | |
| CO9 | Determine total WBC Count | Psychomotor | MK | S | Demonstration/ practical | Written/viva / Practical Performance | F&S | II | |
| CO9 | Demonstrate Packed Cell Volume and Erythrocyte Sedimentation Rate | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |
| CO9 | Demonstrate the Blood Indices | Psychomotor | DK | S | Demonstration/ practical | Written/viva | F&S | II | |
| **Practical 5- Urology** (Non Lecture:- **36** hours) | | | | | | | | | |
| CO9 | Perform physical and microscopic examination of urine | Psychomotor | MK | S | Demonstration/ hands on training | Written/viva / Practical Performance | F&S | II | |
| CO9 | Perform Qualitative analysis of sugar in urine (benedict's method) | Psychomotor | MK | S | Demonstration/ hands on training | Written/viva / Practical Performance | F&S | II | |
| CO9 | Perform | Psychomot | MK | S | Demonstration/ | Written/viva | F&S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| | Qualitative analysis of protein in urine | or | | | practical | | | | |
| CO9 | Estimate Albumin in urine | Psychomotor | MK | S | Demonstration/ practical/ | Written/viva / Practical Performance | F&S | II | |
| **Practical 6- Cardio vascular system** (Non Lecture:- **32** hours) | | | | | | | | | |
| CO9 | Perform palpation of radial pulse | Psychomotor | MK | S | hands on training | Written/viva | F&S | III | |
| CO9 | Describe, Measure & record arterial Blood Pressure in different physiological conditions. | Cognitive/Psychomotor | MK | S | Demonstration/ hands on training | Written/viva | F&S | III | |
| CO9 | Describe, discuss & record Normal Electrocardiogram and interpret rhythm, heart rate and cardiac axis. | Cognitive/ | MK | S | Demonstration/ practical/Early Clinical Exposure | Written/viva | F&S | III | |

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| CO9 | Describe, record & analyze the Heart sounds | Cognitive/Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | III | |
| **Practical 7- Nervous system** (Non Lecture:- **20** hours) | | | | | | | | | |
| CO9 | Demonstrate use of E.E.G machine | Cognitive/Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | II | |
| CO9 | Perform nerve conduction test | Psychomotor | DK | S | Demonstration/ hands on training | Written/viva | F&S | II | |
| **Practical 8- Special senses** (Non Lecture:- **14** hours) | | | | | | | | | |
| CO9 | Measure visual field by perimetry | Psychomotor | MK | S | Demonstration/ practical | Written/viva | F&S | III | |
| CO9 | Measure visual acuity | Psychomotor | DK | S | Demonstration/ practicals/Early Clinical Exposure | Written/viva | F&S | III | |
| CO9 | Test color vision by ishihara chart | Psychomotor | MK | S | Demonstration/ practicals/ | Written/viva | F&S | III | |
| CO9 | Test bone and air conduction using tuning forks | Psychomotor | MK | S | Demonstration/ practicals | Written/viva | F&S | III | |

**Table 5- Non Lecture Activities of Manafeul Aza UNIUG-MZ**

| | Sr No | List non lecture Teaching-Learning methods | No of Activities |
|---|---|---|---|
| A | | Activities in classroom | |
| | 1 | symposium | 20 |
| | 2 | Seminar | 02 |
| | 3 | Early Clinical Exposure | 02 |
| | 4 | Project Work | 03 |
| | 5 | Problem Based Learning | 09 |
| | 6 | Discussion / small Group discussion | 29 |
| | 7 | Tutorials | 09 |
| | 8 | Small group teachings | 08 |
| | 9 | Educational videos | 10 |
| | 10 | Animation clips | 04 |
| | 11 | Role play | 02 |
| | 12 | Concept maps | 08 |
| | 13 | Demonstration | 04 |
| | 14 | Self-directed learnings | 08 |
| | 15 | Activity Learning | 01 |
| | 16 | Simulations | 01 |
| | | Subtotal - **120** | |
| B | | Activities in practical | 280 |
| | **Total** | | **400** |

## Table 6: Assessment Summary

## 6 A - Number of papers and Marks Distribution

| S.No. | Subject | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Practical or Clinical | Viva | Electives | IA | Total | |
| 1 | Manafeul Aza (Human Physiology) Paper – I Paper - II | 2 | 200 | 100 | 20 | 10 | 20 | 150 | 350 |

## 6. B - Scheme of Assessment (formative and Summative)

| SR.NO. | PROFESSIONAL COURSE | DURATION OF PROFESSIONAL COURSE | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First | 3 PA & First TT | 3 PA & Second TT | 3 PA & UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

## 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 | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 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. | Other activities explained in Table 3 Column G3 as per indicated term. |

## 6 E - Question Paper Pattern

### I PROFESSIONAL BUMS EXAMINATIONS

### UNIUG-MZ

### PAPER-I

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 |

### 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(1) - Distribution of Theory examination Paper-I

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ (1 Mark) | SAQ (5 Marks) | LAQ (10 Marks) |
| 1 | ***Umoomi Manafeul Aza*** **( General physiology)** | I | 10 | 5 | 1 | 0 |
| | Al-istitbab (Homeostasis)الاستتباب | | | Yes | Yes | No |
| | Transport across cell membrane انتقال بين الغشاءالخليہ | | | Yes | Yes | No |
| | Action potentialجہدالفعل | | | Yes | Yes | No |
| | Muscle physiology فعليات الاعضاء | | | Yes | Yes | No |
| | Macromoleculesجزئی کبیروی سالمات کبیرہ | | | Yes | Yes | No |
| | Protein synthesis پیدائش لحمین | | | Yes | Yes | No |
| | Acid-base balanceالتوازن الحمضي القلوي | | | Yes | Yes | No |
| | Water balanceالتوازن الماء | | | Yes | Yes | No |
| 2 | **Study of *Khulia* and *Insaja* (Cytology and Histology)** | I | 15 | 5 | 0 | 1 |
| | Qhulia ki khurd beeni sakht-o-Afaal, (Brief discussion and introduction of cytology) خلیہ کی خورد بینی ساخت و افعال | | | Yes | No | Yes |
| | Tareef –e- insaja (definition) تعریف انسجہ | | | Yes | No | Yes |
| | Aqsaam –e- insaja (types)اقسام انسجہ | | | Yes | No | Yes |
| | Insaja ki Khurd beeni sakht ka phailao-wa-afaal, (distribution and function of tissues),انسجہ کی خورد بینی ساخت کا پھیلاؤ و افعال | | | Yes | No | Yes |
| | Nassej-e-bushra (epithelial tissue) نسیج بشریٰ | | | Yes | No | Yes |
| | Naseej-e-waasil (connective tissue), نسیج واصل | | | Yes | No | Yes |
| | Nassj-e-azlee (muscular tissue نسیج عضلی | | | Yes | No | Yes |
| | Naseeje asabi (nervous tissue). نسیج عصبی | | | Yes | No | Yes |
| 3 | ***Khoon wa Nizam-e-Damwi*** **(Blood & Haemopoietic System)**خون و نظام دموی | II | 30 | 10 | 2 | 1 |
| | Khoon ki tareef (definition of blood), Ajza (constituents), Afaal (functions), Lazoojat aur hajam (viscosity and volume). خونکی تعریف،اجزاء، افعال، لزوجت اور حجم | | | Yes | Yes | Yes |
| | Maiyat-ud-dum (blood plasma): Ajza (constituents), Mavaad-e-lahmiya, aur afaal (plasma proteins and their functions) مائیت الدم اجزاء، مواد لحمیہ اور انکے افعال، | | | | Yes | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Kurriyat-e-hamra (RBC): Saqht, ajza-e-tarkeebi (structure, composition), Paidaish (formation), Numu (development), aur Anjam (fate), Majmooyee taadaat (total count), Miqdaar ki takhmeen ke tareeqe (methods of estimation), Aur unke feliyati iqhtilaaf (& their physiological variations) : کریات حمراء ساخت،اجزائے ترکیبی، پیدائش ، نمو اور انجام ،مجموعی تعداد،مقدار کی تخمین کے طریقے اور انکے فعلیاتی اختلاف | | | Yes | Yes | Yes |
| | Hamratuddam (haemoglobin) ke Ajza-e-tarkeebee (composition), Aqsaam (varieties), Khwaas (properties),Miqhdaar ki takhmeen ke tareeqe (method of estimation), Aur afaal (and functions حمرۃالدم کے اجزائے ترکیبی،اقسام، خواص ، مقدار کی تخمین کے طریقے اور افعال. | | | Yes | Yes | Yes |
| | Kurriyat-e-baiza (WBC) ki Saqht(structure), Aqsaam(types), Paidaish(formation), Afaal (functions), Aur inke baahami tanasub (& their differential count : کریات بیضاء ساخت،اجزائے ترکیبی، پیدائش ، نمو اور انجام ،مجموعی تعداد، اور انکے باھمی تناسب ، مقدار کی تخمین کے طریقے اور انکے فعلیاتی اختلاف | | | Yes | Yes | Yes |
| | Aqrase damviya (platelets) ki Saqht (structure), Paidaish (formation) & Afaal (functions).اقراص دمویہ کی ساخت، پیدائش اور افعال | | | Yes | Yes | Yes |
| | Injimaduddam (coagulation of blood) ki Tareef (definition), Awamil e injimaduddam (coagulation factors), Waqfa-e-jiryanuddam (bleeding time), Waqfa-e-injimaduddam (clotting time) aur unki takhmeen (and their estimation) انجمادالدم کی تعریف،عوامل انجمادالدم،وقفہ جریان الدم، وقفہ انجمادالدم اور انکی تخمین | | | Yes | Yes | Yes |
| | Khoon ki girohbandi (Blood Groups) خون کی گروہ بندی | | | Yes | Yes | Yes |
| | Intiqaluddam (blood Transfusion) & Blood Banks انتقال الدم | | | Yes | Yes | Yes |
| **4** | ***Nizam-e-Urooq-e-Lymphavia aur Shabki-o-Bashree Baatini*** **(Lymphatic & Reticulo-endothelial system)** نطام عروق لمفاویہ اورشبکی و بشری باطنی | I | 5 | 0 | 1 | 0 |
| | Rutubat-e-limfavia ki paidaish aur tarkeeb (formation and composition of lymph) رطوبت لمفاویہ کی پیدائش اور ترکیب | | | No | Yes | No |
| | Rutubat-e-limfavia ka dauran (lymphatic channels and lymphatic drainage) | | | No | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| | رطوبت لمفاویہ کا دوران | | | | | |
| | Ghudood-e- limfavia (lymph glands)غدود لمفاویہ | | | No | Yes | No |
| | Nizam-e-shabkiya mubtina ki tamheed aur afaal (introduction to reticulo-endothelial system, and its functions) نطام شبکیہ مبطنہ کی تمہید اور افعال | | | No | Yes | No |
| | Tihaal aur iske afaal (spleen & its functions).طحال اور اسکے افعال | | | No | Yes | No |
| **5** | ***Nizam-e-Dauran-e-Khoon* ( Circulatory system)** نظام دوران خون | III | 20 | 0 | 2 | 1 |
| | Tareef(introduction) تعریف | | | No | Yes | No |
| | Samamaat-e-qalb aur inke afaal (valves of heart and their actions) صمامات قلب اور انکے افعال | | | No | Yes | Yes |
| | Qalb ke makhsoos itsaali ansaja (special junctional tissues), قلب کے مخصوص اتصالی انسجہ | | | No | Yes | Yes |
| | Azla-e-qalb ki khusoosiyat (properties of cardiac muscles) عضلہ قلب کی خصوصیات | | | No | Yes | Yes |
| | Daura-e-qalbi (cardiac cycle) دورہ قلبی | | | No | Yes | Yes |
| | Aswaat-e-qalb (heart sounds) اصوات قلب | | | No | Yes | Yes |
| | Suqoot-e-qalb (heart block) سقوط قلب | | | No | Yes | Yes |
| | Aasaab-e-qalb (nerves of the heart), اعصاب قلب | | | No | Yes | Yes |
| | Mrakaz-e-qalb aur iske afaal (cardiac centre & its function) مرکز قلب اوراسکے افعال | | | No | Yes | Yes |
| | Barqi qalb nigari (electro-cardiograph برقی قلب نگاری | | | No | Yes | Yes |
| | Fisharruddum aur iske feliyati avamil (blood pressure and its physiological control) فشارالدم اوراسکے فعلیاتی عوامل | | | No | Yes | Yes |
| **6** | ***Hayateen* (Vitamins)**حیاتین | II | 10 | 0 | 2 | 0 |
| | Hayateen ki tareef (definition)حیاتین کی تعریف | | | No | Yes | No |
| | Aqsaam (types) اقسام | | | No | Yes | No |
| | Miqdar khurak (daily requirement) مقدار خوراک | | | No | Yes | No |
| | Afaal (functions) افعال | | | No | Yes | No |
| **7** | ***Istihala* (Metabolism)**استحالہ | III | 10 | 0 | 0 | 1 |
| | Istehala ki tareef (introduction to metabolism) استحالہ کی تعریف | | | No | No | Yes |
| | Nashasta ka istehala (metabolism of carbohydrate) نشاستہ کا استحالہ | | | No | No | Yes |
| | Shamiyat ka istehala (metabolism of lipids شحمیات کا استحالہ | | | No | No | Yes |
| | Humooz-e-shorain ka istehala (metabolism of amino acids)حموض شورین کا استحالہ | | | No | No | Yes |
| | Madaniyat aur paani ka istehala (mineral and water metabolism).معدنیات اور پانی کا استحالہ | | | No | No | Yes |

## 6 F(2) - Distribution of Theory examination Paper-II

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ (1 Mark) | SAQ (5 Marks) | LAQ (10 Marks) |
| **1.** | ***Nizam-e-Hazm* (Digestive system)** نظام ھضم | I | 15 | 0 | 1 | 1 |
| | Tamheed-e-nizam-e-hazm (introduction of digestive system)<br>تمہید نظام ھضم | | | No | Yes | Yes |
| | Khurd beeni sakht of ghudood-e-luabiya (histological structure of salivary glands), luab-e-dahan ki tarkeeb (composition of saliva)<br>غدود لعابیہ کی خوردبینی ساخت،لعاب دھن کی ترکیب | | | No | Yes | Yes |
| | Tarssho aur afaal (secretion of saliva and functions) لعاب دہن کاترشح اور افعال | | | No | Yes | Yes |
| | Rutubat-e-maaddi (gastric juice) رطوبات معدی | | | No | Yes | Yes |
| | Rutubat-e-mayvi, aur rutubat-e-safravi ki tarkeeb,tarassho aur afaal (composition of succus entericus and bile secretion and their functions)<br>رطوبات معوی اور رطوبات صفراوی کی ترکیب ، ترشح اور افعال | | | No | Yes | Yes |
| | Majra-e-ghizai ke harkat aur unke afaal (movements of alimentary canal and their functions<br>مجریٰ غذائی کی حرکات اور انکے افعال | | | No | Yes | Yes |
| | Fuzla ki paidaish-o-iqhraj (formation of faeces and defecation)<br>فضلہ کی پیداش و اخراج | | | No | Yes | Yes |
| | Jigar ki saaqht-o-afaal, (structure and & functions of liver)<br>جگر کی ساخت و افعال | | | No | Yes | Yes |
| | hazm-e-nishashta (digestion of carbohydrate), ھضم نشاستہ | | | No | Yes | Yes |
| | hazm-e- shorain (digestion of protein) ھضم شورین | | | No | Yes | Yes |
| | andhazm-e-shaham (digestion of lipids) ھضم شحم | | | No | Yes | Yes |
| | paani ka injezab (absorption of water) پانی کا انجذاب | | | No | Yes | Yes |
| **2.** | ***Nizam-e-Tanaffus* (Respiratory system)** نظام | I | 15 | 0 | 1 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | تنفس | | | | | |
| | Mukhtalif tanaffussi aaza ki tamheed (introduction of respiratory system/organs)مختلف تنفسی اجزاء کی تمہید | | | No | Yes | Yes |
| | Aaza –i- tanaffys ki Khurd beeni sakht (histological structure) اجزائے تنفسی کی خوردبینی ساخت | | | No | Yes | Yes |
| | Uzlaat-e-tanaffuss aur unke afaal (respiratory muscles & functions of respiratory system/organs) عضلات تنفس اور انکے افعال | | | No | Yes | Yes |
| | Oxygen aur carbon di oxide ki muntaqeeli (transport of oxygen & carbon dioxide) آکسیجن اور کاربن ڈائی آکسائڈ کی منتقلی | | | No | Yes | Yes |
| | Riya aur insaja may gason ka tabadila (gaseous exchange in lungs and tissues) ریہ اور انسجہ میں گیسوں کا تبادلہ | | | No | Yes | Yes |
| | Tanaffuss ke marakiz (centers of respiration) تنفس کے مراکز | | | No | Yes | Yes |
| | Masnooi tanaffuss aur inke mukhtalif tareeqe (artificial respiration and its methods) مصنوعی تنفس اوران کے مختلف طریقے | | | No | Yes | Yes |
| | Jasamat-e-reviya (pulmonary volume) جسمات ریویہ | | | No | Yes | Yes |
| | Waqaat-e-reviya (pulmonary capacities) وقعت ریویہ | | | No | Yes | Yes |
| | Usre tanaffuss (dyspnoea)عسر تنفس | | | No | Yes | Yes |
| | Qillat-e-baad (anoxia) قلت باد | | | No | Yes | Yes |
| | Dushwaar-e-tanaffuss (apnoea)دشوار تنفس | | | No | Yes | Yes |
| | Izdiyad-e-tanaffuss (hypercapnia)ازدیاد تنفس | | | No | Yes | Yes |
| | Sat-he-martafa aur gehre paani ke feliyati asraat (physiological effect of high altitude & under water) سطح مرتفع اور گہرے پانی کے فعلیاتی اثرات | | | No | Yes | Yes |
| **3.** | ***Nizam-e-Iqhraj* ( Excretory system)** نظام اخراج | II | 15 | 5 | 2 | 0 |
| | Kulliya ki saqht-o-afaal (Structure and function of kidney) کلیہ کی ساخت وافعال | | | Yes | Yes | No |
| | Aljihazul mujawiru lilkubaiba ( juxta--glomerular apparatus and renin- angiotensin system) الجہازالمجاورہ للکبیبہ اور نظام رینن و انجیوٹنسن | | | Yes | Yes | No |
| | Paidaish-e- bowl, tarkeeb-e-bowl, aur miqhdaar-e-bowl (urine formation, quantity & concentration of urine) پیدائش بول ، ترکیب بول اور مقدار بول | | | Yes | Yes | No |
| | Renal regulation of fluid and electrolytes and acid-base balance | | | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| | توازن کہارل اور توازن حمضی قلوی میں کلیہ کا کردار | | | | | |
| | iqhraj-i- bowl aur iska mechania (micturition and its mechanism) اخراج بول اور اسکامیکانیہ | | | Yes | Yes | No |
| | Masana aur uski Kharabiyan (urinary bladder and its abnormalities ) مثانہ اور اس کی خرابیاں | | | Yes | Yes | No |
| | Artificial kidney, dialysis and renal transplantation مصنوعی کلیہ،ڈائلیسس اورزَرْع الکلیہ | | | Yes | Yes | No |
| | Renal function tests اخْتِبار وَظيفَة الكُلْيَة | | | Yes | Yes | No |
| | Unani conepts of idrar-e-bowl ادرار بول کا یونانی طبی مَفهُوم | | | Yes | Yes | No |
| **4.** | ***Nizam-e-jild* (Integumentary system)** نظام جلد | II | 10 | 5 | 1 | 0 |
| | Jild ki sakht aur afaal (structure and functions of skin) [integument], جلدکی ساخت و افعال | | | Yes | Yes | No |
| | Paseena (sweat) پسینہ | | | Yes | Yes | No |
| | Hararat-e-badaniya ka tavazun, (regulation of body temperature) حرارت بدنیہ کا توازن | | | Yes | Yes | No |
| | Ghair tabiyyee hararat aur qillate-hararat (abnormal and sub-normal temperature). غیر طبعی حرارت و قلت حرارت | | | Yes | Yes | No |
| **5.** | ***Nizam-e-Aasab* ( Nervous system)** نظام اعصاب | II | 15 | 5 | 2 | 0 |
| | Organization of nizam-e-aasab (nervous system)تنظیم نظام اعصاب | | | Yes | Yes | No |
| | Naseej-e- asabi (neural tissue)نسیج عصبی | | | Yes | Yes | No |
| | Leef-e= asabi (Nerve fibers) لیف عصبیی | | | Yes | Yes | No |
| | Mashbak/ittisal (synapse):اتصال/مشبک | | | Yes | Yes | No |
| | Asabi mursalat (neurotransmitters) عصبی مرسلات | | | Yes | Yes | No |
| | Markazi nizam-e- asab (Central nervous system) مرکزی نظام اعصاب | | | Yes | Yes | No |
| | Assabeel-o shabkiya hissi (Sensory pathways and tracts) السبیل و شبکیہ حسی | | | Yes | Yes | No |
| | Nizam-e-harkiyah (Motor system) نظام حرکیہ | | | Yes | Yes | No |
| | Alfailur-rudood (Reflexes)الفعل ردود | | | Yes | Yes | No |
| | Muqheeqh uqda-e qaidiyyah (Cerebellum & basal ganglia)مخیخ اور عقدہ قعدیہ | | | Yes | Yes | No |
| | nizame asabi la iradi (Autonomic nervous system) الجهاز العصبي اللاإرادي | | | Yes | Yes | No |
| | nuqha (Spinal cord)نخاع | | | Yes | Yes | No |
| | maseerutus sailunuqhayi (Cerebero-spinal | | | Yes | Yes | No |

| | | | | | | |
|---|---|---|---|---|---|---|
| | fluid)مسیرۃ السائل النخاعی | | | | | |
| | Al naum (Physiology of sleep) النوم | | | Yes | Yes | No |
| | Waj-o- alam (Physiology of pain) وجع و الم | | | Yes | Yes | No |
| | EEG & nerve tests | | | Yes | Yes | No |
| | Unani concept of quwwat-e-nafsaniyyah قوت نفسانیہ | | | Yes | Yes | No |
| | Quwwat-e zaiqah wa shammah (the taste and smell sensation) قوت ذائقہ و شامہ | | | Yes | Yes | No |
| | Uzn (Ear) اذن | | | Yes | Yes | No |
| | Ghisha-e tabli aur azeematusameiyyah (Tympanic membrane and the ossicular system) غشاء طبلی اور عظیمات السمعیہ | | | Yes | Yes | No |
| | Cochlea قوقلیا | | | Yes | Yes | No |
| | Saut (Sound ) صوت | | | Yes | Yes | No |
| | Mechania-e quwwat-e-saut-e-markazi (Central auditory mechanisms) میکانیہ قوت صوت مرکزی | | | Yes | Yes | No |
| | Hearing test | | | Yes | Yes | No |
| | Eye عین | | | Yes | Yes | No |
| | Ratubat-e- ain (Fluid system of the eye) رطوبات عین | | | Yes | Yes | No |
| | Photochemistry of vision الكيمياء الضوئية للرؤية | | | Yes | Yes | No |
| | Ruyiyat ka mechania (Physiology of vision) رؤیت کا میکانیہ | | | Yes | Yes | No |
| | Harkat-e-ain (Eye movements) حرکات عین | | | Yes | Yes | No |
| **6.** | ***Nizam-e-ghudood* la qanatiyah ( Endocrine system)** | III | 15 | 5 | 0 | 1 |
| | Ghudood-e-la qanatiyah (endocrine gland) غدودلا قناتیہ | | | Yes | No | Yes |
| | Tanzeem-e-afraz rasilat (regulation of hormones) تنظیم افرازرسیلات | | | Yes | No | Yes |
| | Rasilat ka mekaniya-i- amal (Mechanism of action of hormones) رسیلات کا میکانیہ عمل | | | Yes | No | Yes |
| | Rasilat aur istihala-e- kailshium (Hormones and calcium metabolism) رسیلات اور استحالہ کیلشیم | | | Yes | No | Yes |
| | Taht-us-sarir (hypothalamus)تحت السریر | | | Yes | No | Yes |
| | Ghudda nukhamiyah (pituitary gland) غدہ نخامیہ | | | Yes | No | Yes |
| | Rasila-e-namu (growth hormone )رسیلہ نمو | | | Yes | No | Yes |
| | Ghudda-e-nukhmiya muaqqhar (posterior pituitary) غدہ نخامیہ مؤخر | | | Yes | No | Yes |
| | Ghudda-e-darqiyyah (thyroid gland) غدہ درقیہ | | | Yes | No | Yes |
| | Ghudda-e- kazriyyah (adrenal glands) غدہ کزریہ | | | Yes | No | Yes |
| | Banqiras (pancreas):بانقراس | | | Yes | No | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Ghudda sa'atariyyah (thymus) and ghhudda-e-sanobariyyah (pineal gland): غدہ صعتریہ اور غدہ صنوبریہ | | | Yes | No | Yes |
| | Thyroid function tests | | | Yes | No | Yes |
| | Endocrine consequences and metabolism | | | Yes | No | Yes |
| **7.** | ***Nizam-e-tauleed* (Reproductive system)** | III | 15 | 0 | 1 | 1 |
| | Sex differentiation & determination | | | No | Yes | Yes |
| | Bulooghat (puberty): بلوغت | | | No | Yes | Yes |
| | Nizam-e-tauleed mardana (male reproductive system) نظام تولید مردانہ | | | No | Yes | Yes |
| | Rasila-e-khusya (testosterone) رسیلہ خصیہ | | | No | Yes | Yes |
| | Ghudda-e-madhi(prostate) غدہ مذی | | | No | Yes | Yes |
| | Nizame tawleed zanana(female reproductive system) ) نظام تولید زنانہ | | | No | Yes | Yes |
| | Rasila muwallid-i- bayda (oestrogen) and rasila mu'in al-haml (progesterone): رسیلہ مولد بایئدہ و رسیلہ معین حمل | | | No | Yes | Yes |
| | Hamal (pregnancy), wiladat (parturition) & ilban / amal-e-raza'at (lactation) حمل، ولادت و عمل رضاعت | | | No | Yes | Yes |
| | Iyas (menopause) ایاس | | | No | Yes | Yes |
| | Unani concepts of quwwat-e-tanasulliya قوت تناسلیہ کا طبی مفہوم | | | No | Yes | Yes |

## 6 G(1) - Question Paper blueprint Paper I

| A<br>Question Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br><br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number 1<br>2. Topic number 1<br>3. Topic number 1<br>4. Topic number 1<br>5. Topic number 1<br>6. Topic number 2<br>7. Topic number 2<br>8. Topic number 2<br>9. Topic number 2<br>10. Topic number 2<br>11. Topic number 3<br>12. Topic number 3<br>13. Topic number 3<br>14. Topic number 3<br>15. Topic number 3 |

| | | |
|---|---|---|
| | | 16. Topic number 3<br>17. Topic number 3<br>18. Topic number 3<br>19. Topic number 3<br>20. Topic number 3 |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic no. 1<br>2. Topic no. 3<br>3. Topic no. 3<br>4. Topic no. 4<br>5. Topic no. 5<br>6. Topic no. 5<br>7. Topic no. 6<br>8. Topic no. 6 |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic no .2<br>2. Topic no 3.<br>3. Topic no 5.<br>4. Topic no 7. |

## 6 G(2) - Question Paper blueprint Paper II

| A<br>Question Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| .Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number 3<br>2. Topic number 3<br>3. Topic number 3<br>4. Topic number 3<br>5. Topic number 3<br>6. Topic number 4<br>7. Topic number 4<br>8. Topic number 4<br>9. Topic number 4<br>10. Topic number 4<br>11. Topic number 5<br>12. Topic number 5<br>13. Topic number 5<br>14. Topic number 5 |

| | | |
|---|---|---|
| | | 15. Topic number 5<br>16. Topic number 6<br>17. Topic number 6<br>18. Topic number 6<br>19. Topic number 6<br>20. Topic number 6 |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br><br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic no. 1<br>2. Topic no. 2<br>3. Topic no. 3<br>4. Topic no 3<br>5. Topic no. 4<br>6. Topic no. 5<br>7. Topic no. 5<br>8. Topic no. 7 |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic no .1<br>2. Topic no 2.<br>3. Topic no 6.<br>4. Topic no 7. |

## 6 H - Distribution of Practical Examination

| SN | Heads | Marks |
|---|---|---|
| **1** | Practical (Total Marks 100) | |
| | **Spotting :** Microscopic Identification of Histological Slides (05 Slides) | 25 |
| | **Experiment:** Urine Examination/Haematology Tests (any 01 Experiment) | 20 |
| | **Measurements:** Blood Pressure/ Spirometry/ Perimetry/Visual Field/ Ishihara Test/ Hearing Conduction Test (any 01 Measurement) | 20 |
| | **Electrophysiology:** ECG/EEG/NCT (any 01 Test) | 25 |
| | **Record Book** | 10 |
| **2** | Viva Voce | 20 |
| **3** | Internal | 20 |
| **4** | Electives | 10 |
| **Total Marks** | | **150** |

## Table 7. Reference Books/ Resources:

| **Book** | | |
|---|---|---|
| **S. No.** | **Name of Book** | **Name of Author** |
| 1 | Human Physiology | C.C. Chatterjee - Medical Allied Agency |
| 2 | Textbook of Medical Physiology | Guyton & Hall - Harcourt Asia & Saunders |
| 3 | Essentials of Medical Physiology | Sembulingam - JP |
| 4 | Review of Medical Physiology | Ganong - McGraw Hill |
| 5 | Medical Physiology | Khurana - Elsevier |
| 6 | Physiology | Berne & Levy – Elsevier |
| 7 | Manafeul Aza | NCPUL, New Delhi |
| 8 | Darsi Manafeul Aza (Blood) | Ghulam Muntaqa |
| 9 | Darsi Manafeul Aza (General Physiology) | Ghulam Muntaqa |
| 10 | Manafeul Aza (Ghiza, Hazm, Istihala wa | Iqtidarul Hasan Zaidi |

| | | |
|---|---|---|
| | Ikhraj) | |
| 11 | Manafeul Aza | Ansari Mohd Yusuf |
| 12 | Manafeul Aza | Javed Ahmad Lari |
| 13 | Manafeul Aza | Anwaar Ahmad Qureshi |

1

# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS

## (PRESCRIBED BY NCISM)

## TAREEKHE TIB
## SUBJECT CODE: UNIUG-TT
## HISTORY OF MEDICINE

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

ncism

प्राणाभिसरः प्राणायतनानाम्

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

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| | | | |
|---|---|---|---|
| 12. | طب یونانی اور ہندوستان<br>Tibbe Unani aur Hindustan | Urdu | اشہر قدیر<br>Ashhar Qadeer |
| 13. | کلیات طب کے مصادر ومراجع<br>Kulliyat e tibb ke Masadir-o-Marajeh | Urdu | رضی الاسلام ندوی<br>Raziul Islam Nadwi |
| 14. | طبّی صحائف<br>Tibbi Sahaif | Urdu | اشہر قدیر<br>Ashhar Qadeer |
| 15. | رموز الا طباء<br>Rumooz Al Atibba | Urdu | محمد فیروز الدین<br>Mohammad Firozuddin |
| 16. | تاریخ الحکماء<br>Tareekh al Hukma | Urdu | جمال الدین قفطی<br>Jamaluddin Qifti |
| 17. | قرون وسطیٰ میں مسلمانوں کی علمی خدمات<br>Qaroon wasta mein Musalmano ki Ilmi Khidmat | Urdu | مولوی عبدالرحمٰن<br>Maulvi Abdur Rehman |
| 18. | عہد جاہلیت میں عرب فن طب<br>Ahde Jahiliyat mein Arab Fanne Tibb | Urdu | ڈاکٹر غیاث الدین<br>Dr.Ghayasuddin |
| 19. | تاریخ طب<br>Tareekhe Tibb | Urdu | آغا اشرف<br>Agha Ashraf |
| 20. | ہندوستان میں طب یونانی کا آغاز و ارتقاء<br>Hindustan mein Tibb-e-Unani ka Aghaz wa Irtiqa | Urdu | حکیم الطاف احمد اعظمی<br>Hakim Altaf Ahmad Azmi |
| 21. | طب العرب<br>Tibbul Arab | Urdu | ای جی براؤن/علی احمد نیّر واسطیٰ<br>E.G.Brown/Ali Ahmad Nayyar Wasti |
| 22. | ہندوستان کے مشہور اطباء<br>Hindustan ke Mashhoor Atibba | Urdu | حکیم حافظ حبیب الرحمان<br>Hakim Hafiz Habibur Rahman |
| 23. | Introduction to the History of Science | English | George Sarton |
| 24. | History of Unani System of Medicine | English | Altaf Ahmad Azmi |
| 25. | Unani Medical Literature Produced from Hippocratic Period (Fl. 462 BC) to 8th Century A.D. | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |
| 26. | History and Accounts of Literature Written in Unani Medicine 9th to 12th Century | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |
| 27. | Unani Medical Literature Produced from 13th Century to 16th Century | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |

Course curriculum from page no. 1 to 55 is approved



20/6/2023 20/6/2023 20/6/23 20/6/23 20/6/23

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UNIUG-TT

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**I professional BUMS**

Subject Code: **UNIUG-TT**

**Tareekhe Tib**

## KEY POINTS

| **Total number of Teaching hours: 150** | | | |
|---|---|---|---|
| **Lecture hours (LH) - Theory** | | **50 Hours** | **50 Hours (LH)** |
| Paper I | 50 Hours | | |
| | | | |
| **Non-Lecture hours (NLH) – Theory** | | **100 Hours** | **100 Hours (NLH)** |
| Paper I | 100 Hours | | |
| | | | |
| **Non-Lecture hours (NLH) - Practical** | | **NA** | |

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

# Preface

The course Tareekh-e-Tibb (History of Medicine) covers the history by the roots and periodic development of Unani Medicine since the ancient times through scholastic medieval traditions to the present day.

Tareekh-e-Tibb recognizes the eminent physicians and institutions that advanced the Unani system of medicine and so motivate the physicians of the time. The elementary framework of Unani Medicine is based on the views of Buqrat (Hippocrates) as he laid foundation of clinical medicine on the basis of his careful observations. After Buqrat (Hippocrates), Jalinoos (Galen) stands out and consolidated Hippocratic doctrine by practical approach on which Zakariya Razi (Rhazes) and Ibn-e-Sina (Avicenna) constructed an imposing edifice. Imbibing what was the best in the contemporary systems of traditional medicine in Egypt, Syria, Iraq, Persia, India, China and other middle east &far east countries, they enriched the Unani system of Medicine that is why the system is known in different parts of the world, with different names such as Greeco-Arab Medicine, Ionian Medicine, Arab Medicine, Traditional Medicine, Oriental Medicine & Eastern Medicine etc.

The course not only chronicles the global acceptance and impact of Unani system of medicine with its distinction but also leads to improvements in the context of research & development in the field. Unani Medicine has a long and impressive record in India since its introduction. Today, India is one of the leading countries as far as the practice of Unani Medicine is concerned. It has the largest number of Unani educational, research and health care institutions. The course also covers valuable and timeless lessons in the realm of Medical Ethics to be followed by the physicians. Unani System of Medicine appreciate thefaithfulness of physicians towards ethics as Hippocrates produced aremarkable ethical code of conduct named as Hippocratic Oath which is everlasting to guide the physicians to be careful regardingmedical ethics.

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**First BUMS**:

**Course Code and Name of Course**

| | Course code | Name of Course |
|---|---|---|
| | UNIUG-TT | Tareekhe Tib (History of Medicine) |
| | | |

**Table 1- Course outcomes and matched Program outcomes**

| SR1<br>CO<br>No | A1<br>Course Outcome (CO) UNIUG-TT<br>At the end of the course UNIUG-TT, the student should be able to- | B1<br>Course Outcome matched with program outcomes. |
|---|---|---|
| CO1 | Understand to describe gradual development of art ofhealingand recognize that Unani medicine is a myth free logically sound, experiment based medical system with anall-time influence on progressive medical sciences since its advent. | PO1,PO2,PO6 |
| CO2 | Distinguish between pre and post Hippocratic level of medicine, Comprehend the reasons behind acknowledgment of Buqrat (Hippocrates)as the Father of Medicine and the outstanding subsequent philosophers and physicians. | PO1,PO2,PO6 |
| CO3 | Discuss the services of Bait-al-Hikmat to collect medical knowledgeof the time, its Arabic translation which becomes foundation of Greek-o-Arabic Medicine and legacy of renowned physicians of medieval era. | PO2,PO6 |
| CO4 | Explain the leading account of creditable documents concerning with the beginning, progress and practice of Unani medicine with their forms and places to use them as a reference. | PO4,PO8 |
| CO5 | Discuss introduction of Unani Medicine in India, famous Indian physicians and their contributions along with their interdisciplinary approach with Ayurveda by virtue of which Unani Medicine becomes indigenous. | PO4,PO6 |
| CO6 | Recognize and explain the substantial development of Infrastructure in respect to Unani Medicine under the patronage of Indian Government. | PO8 |
| CO7 | Appreciate and discuss thefaithfulness of physicians towards ethics since antiquity, as Hippocrates specially wrote aremarkable ethical code of conduct, which, in present self-interested era becomemoreprecious. | PO3,PO5,PO7 |

**Table 2: Contents of Tareekhe Tib**

| | A2<br>List of Topics UNIUG-TT | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| **1.** | **(Tareekh-e-Tibb aur iski Ahmiyat) تاریخ طب اور اس کی اہمیت** | I | 10 | 01 | 2 |
| **2.** | **فن طب کی ابتداء اور اس کے اولین مراکز**<br>**(Fanne Tibb ki Ibteda aur iske Awwaleen Marakiz)**<br>a. بابلی وآشوری طب (Babuli wa Aashuri Tibb)<br>b. مصری طب (Misri Tibb)<br>c. چینی طب (Cheeni Tibb)<br>d. ہندی طب / آیورویدا (Hindi Tibb/Ayurveda)<br>e. ایرانی طب اور مدرسہ جندی شاپور (Irani Tibb aur Madrasa Jundi Shapur)<br>f. یونانی طب (Unani Tibb) | I | | 04 | 08 |
| **3.** | **یونانی طب ماقبل بقراط (Unani Tibb ma Qabl Buqrat)**<br>a. اسقلی بیوس (Asqalibiyoos) | I | 05 | 01 | 02 |
| **4.** | **بقراط اور اس کے بعد کے یونانی اطباء**<br>**(Buqrat aur uske baad ke Unani Atibba)**<br>a. بقراط (Buqrat)<br>b. ارسطو (Arastu)<br>c. ہیروفیلوس (Herofiloos.)<br>d. ایراسسطراطوس (Erasistratoos)<br>e. مدرسہ اسکندریہ (Madrasa Askandriya) | I | 05 | 03 | 06 |
| **5.** | **رومی طب اور بازنطینی طب (Roomi Tibb aur Bazantini Tibb)**<br>a. دیسقوریدوس (Desqooridoos)<br>b. جالینوس (Jalinoos) | I | 05 | 02 | 04 |
| **6.** | **عربی طب (Arabi Tibb)**<br>**I. عہد جاہلیت (Ahd-e- Jahiliyat)** | I | 15 | 06 | 12 |

| | | | | | |
|---|---|---|---|---|---|
| | a. حارث بن کلدہ (Haris bin Kilda)<br>II. طب نبوی (Tibb- e- Nabwi)<br>III. دوراموی (Daur Umwi)<br>a. جابر بن حیان (Jabir bin Hayyan)<br>b. خالد بن یزید (Khalid bin Yazeed)<br>IV. عباسی دور (Abbasi Daur)<br>a. بیت الحکمت (Baitul Hikmat)<br>b. یوحنا بن ماسویہ (Yohanna bin Masawayh)<br>c. حنین بن اسحٰق (Hunain bin Ishaq)<br>d. ثابت بن قرہ (Sabit bin Qurra)<br>e. یعقوب بن اسحٰق (Yaqoob bin Ishaq)<br>f. قسطا بن لوقا (Qusta bin Luqa)<br>g. جبرائیل بن بختیشوع (Jibrayeel bin Bakhtishu)<br>h. بغداد میں ہندوستانی اطباء کی آمد اور آیورویدک کتابوں کے ترجمے<br>(Baghdad mein Hindustani Atibba ki Aamad aur Ayurvedic Kitabon ke Tarjume) | | | | |
| 7. | طب قرون وسطیٰ میں (Tibb Quroon-e-Usta mein)<br>a. علی بن ربن طبری (Ali bin Rabban Tabri)<br>b. احمد بن محمد طبری (Ahmad bin Mohammad Tabri)<br>c. محمد بن زکریا رازی (Mohammad bin Zakariya Razi)<br>d. علی بن عباس مجوسی (Ali bin Abbas Majoosi)<br>e. ابن سینا (Ibn-e-Sina)<br>f. ابو منصور نوح القمری (Abu Mansoor Nooh al Qamri)<br>g. ابو سہل مسیحی (Abu Sahal Masihi)<br>h. اسماعیل جرجانی (Ismail Jurjani)<br>i. نجیب الدین سمرقندی (Najeebuddin Samarqandi)<br>j. علاء الدین قرشی (Alauddin Qarshi)<br>k. نفیس بن عوض کرمانی (Nafees bin Awz kirmani) | II | 15 | 08 | 16 |

| | | | | | |
|---|---|---|---|---|---|
| | l. علی بن عیسیٰ کحال (Ali bin Isa Kahhal)<br>m. ابن ہبل بغدادی (Ibn-e-Hubal Baghdadi)<br>n. ابن جزلہ (Ibn-e-Jazla)<br>o. ابن بطلان (Ibn-e-Butlan)<br>p. عبداللطیف بغدادی (Abdul Lateef Baghdadi)<br>q. کمال الدین ایرانی (Kamaluddin Irani)<br>r. محمود آملی (Mahmood Aamli) | | | | |
| **8.** | **اطباءاندلس(Atibba Undulus)**<br>a. ابن رشد (Ibn-e-Rushd)<br>b. ابوالقاسم زہراوی (Abul Qasim Zahrawi)<br>c. ابن خطیب (Ibn-e-Khateeb)<br>d. ابن بیطار (Ibn-e-Baitar)<br>e. ابن زہر (Ibn-e-Zuhr) | II | 05 | 03 | 06 |
| **9.** | **اطباء مصروشام (Atibba Misr wa Sham)**<br>a. داؤدانطاکی (Dawood Antaki)<br>b. ابن ہیثم (Ibn-e-Haysham)<br>c. ابن القف مسیحی (Ibn-al-Qaf Masihi)<br>d. اسحٰق بن سلیمان اسرائیلی (Ishaq bin Sulaiman Israili) | II | 05 | 02 | 04 |
| **10.** | **طب یونانی ہندوستان میں (Tibb-e-Unani Hindustan main)**<br>**I. عہد تغلق (Ahd-e-Tughlaq)**<br>a. ضیاء محمد مسعود رشید زنگی (Zia Mohammad Masood Rasheed Zangi)<br>**II. عہد لودھی (Ahd-e-Lodhi)**<br>a. بہوہ بن خواص خان (Bahwa bin Khawas Khan)<br>**III. عہد مغلیہ (Ahd-e-Mughliya)**<br>a. حکیم علی گیلانی (Hakim Ali Gilani)<br>b. حکیم صدرا (Hakim Sadra)<br>c. حکیم امان اللہ خان (Hakim Amanullah Khan)<br>d. حکیم اکبر ارزانی (Hakim Akbar Arzani)<br>e. حکیم ہاشم علوی خان (Hakim Hashim Alwi Khan) | II | 15 | 10 | 20 |

| | | | | | |
|---|---|---|---|---|---|
| | f. حکیم یوسفی (Hakim Yusufi)<br>g. حکیم شریف خان (Hakim Shareef Khan)<br>**IV. قطب شاہی دور (Qutub Shahi Daur)**<br>a. حکیم میر مومن (Hakim Mir Momin)<br>b. حکیم الملک نظام الدین گیلانی (Hakim-ul-mulk Nizamuddin Gilani)<br>**V. نظام شاہی دور (Nizam Shahi Daur)**<br>a. رستم جرجانی (Rustam Jurjani)<br>b. حکیم ولی گیلانی (Hakim Wali Gilani)<br>**VI. عادل شاہی دور (Aadil Shahi Daur)**<br>a. ابوالقاسم فرشتہ (Abul Qasim Farishta)<br>**VII. آصف جاہی دور (Aasif Jahi Daur)**<br>a. حکیم رضا علی خان (Hakim Raza Ali khan)<br>b. حکیم شفائی خان (Hakim Shafai Khan)<br>**VIII. گجرات کا مشہور طبیب (Gujrat ka Mashhoor Tabeeb)**<br>a. شہاب عبد الکریم ناگوری (Shahab Abdul Kareem Nagowri)<br>**IX. برطانوی عہد (Bartanawi Ahad)**<br>a. حکیم اجمل خان (Hakim Ajmal khan)<br>b. حکیم عبد العزیز لکھنوی (Hakim Abdul Aziz Lucknawi)<br>c. حکیم اعظم خان (Hakim Azam khan)<br>d. حکیم عبدالحمید ( Hakim Abdul Hameed)<br>e. حکیم عبد الطیف فلسفی (Hakim Abdul Lateef Falsafi)<br>f. حکیم عبد الحلیم لکھنوی (Hakim Abdul Haleem Lucknawi)<br>g. حکیم احمد حسین عثمانی (Hakim Ahmad Husain Usmani)<br>**X. چند دیگر مشہور اطباء (Chand Digar Mashhoor Atibba)**<br>a. حکیم محمد کبیر الدین (Hakim Mohammad Kabiruddin) | | | | |

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| | b. حکیم غلام حسنین کنتوری (Hakim Ghulam Hasnain Kintoori)<br>c. حکیم محمد الیاس خان (Hakim Mohammd Ilyas khan )<br>d. حکیم عبدالحمید دہلوی (Hakim Abdul Hameed Dehlvi)<br>e. حکیم عبدالرزاق (Hakim Abdul Razzaq) | | | | |
| **11.** | **ہندوستان کے مشہور طبی خانوادے**<br>**(Hindustan ke Mashoor Tibbi Khanwade)**<br>a. خاندان شریفی (Khandan-e-Shareefi)<br>b. خاندان عزیزی (Khandan-e-Azeezi)<br>c. خاندان عثمانی (Khandan-e-Usmani) | III | 05 | 02 | 04 |
| **12.** | **ہندوستان میں طب یونانی کے فروغ میں درس گاہوں کا کردار**<br>**(Hindustan mein Tibb-e-Unani ke Farogh mein Darsgahon ka Kirdar)**<br>a. اے اینڈ یو طبیہ کالج، قرول باغ (A & U Tibbi College Karol Bagh Delhi)<br>b. اجمل خان طبیہ کالج، علی گڑھ (Ajmal Khan Tibbiya College, Aligarh)<br>c. تکمیل الطب کالج، لکھنؤ (Takmeelut Tibb College,Lucknow)<br>d. اسٹیٹ یونانی میڈیکل کالج، پریاگراج (State Unani Medical College, Prayagraj)<br>e. گورنمنٹ یونانی میڈیکل کالج، پٹنہ (Government Unani Medical College, Patna)<br>f. جامعہ طبیہ /اسکول آف یونانی میڈیکل ایجوکیشن اینڈ ریسرچ، جامعہ ہمدرد، نئی دہلی (Jamia Tibbiya/School of Unani Medical Education & Research, Jamia Hamdard, New Delhi)<br>g. نظامیہ طبیہ کالج، حیدرآباد (Nizamia Tibbia College ,Hyderabad) | III | 05 | 02 | 04 |
| **13.** | **ہندوستان میں طب یونانی کے انتظامی و تحقیقی شعبۂ جات اور ان کی اہم کارگزاریاں**<br>**(Hindustan mein Tibb-e-Unani ke Intezami wa Tehqiqi Shobajat aur unki Aham** | III | 05 | 02 | 04 |

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| | **Karguzariya)**<br>a. آیوش (AYUSH)<br>b. این - سی - آئی -ایس-ایم ( NCISM)<br>c. سی-سی-آر-یو-ایم (CCRUM)<br>d. این- آئی-یو-ایم (NIUM)<br>e. ٹی-کے-ڈی-ایل (TKDL) | | | | |
| **14.** | **طبّی اخلاقیات (Tibbi Akhlaqiyat)**<br>a. فن طب کی عظمت اور شرافت (Fanne Tibb ki Azmat aur Sharafat)<br>b. طبّی اخلاقیات (Tibbi Akhlaqiyat)<br>c. معاہدہ بقراطیہ اور اس کا پس منظر (Muaheda-e-Buqratiya aur Uska pas Manzar)<br>d. معاہدہ بقراطیہ کے متن کا اردو ترجمہ (Muaheda-e-Buqratiya ke Matan ka Urdu Tarjuma)<br>e. اطباء کے اوصاف (Attiba ke Aausaf)<br>f. متعلمین طب کے اوصاف (Mutallmeen-e-Tibb ke Aausaf)<br>g. سی-سی-آئی-ایم کے مرتب کردہ ضابطہ اخلاق برائے طبیب (CCIM ke Marattab karda Zabta-e-Akhlaq barae Tabeeb)<br>h. یونانی اطباء کے اختیارات (Unani Atibba ke Akhtiyarat)<br>i. غیر اخلاقی طبابت (Ghair Akhlaqi Tababat) | III | 05 | 04 | 08 |
| **Total:** | | | | **50** | **100** |

## Table 3: Learning objectives of Tareekhe Tib UNIUG-TT (Theory)

| 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 to know | E3 Level Does/shows / Knows how/ Knows | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **TOPIC 1- TAREEKH-E-TIBB AUR ISKI AHMIYAT** (Lecture:- **1** hours, Non lecture **2** hours) | | | | | | | | | |
| CO1 | Describe Tareekh-e-Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Recognize and explain the importance of Tareekh-e-Tibb. | Cognitive, Comprehension | MK | Know | Group Discussion | Written/Viva | F&S | I | |
| **TOPIC 2- FANNE TIBB KI IBTEDA AUR ISKE AWWALEEN MARAKIZ** (Lecture:- **4** hours, Non lecture **8** hours) | | | | | | | | | |
| CO1 | Explain the history of Medicine in ancient times. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Describe fanne tibb ki ibteda aur iske awwaleen marakiz. | Cognitive, Recall | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | I | |
| **(a) Babuli wa Aashuri Tibb.** | | | | | | | | | |
| CO1 | Explain Babuli wa Aashuri Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Describe the fundamental concepts of Babuli wa Aashuri Tibb. | Cognitive Recall | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | I | |
| CO1 | Describe the Mode of treatments in Babuli wa Aashuri Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Identify the Source of information for Babuli wa Aashuri Tibb. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | I | |
| **(b) Misri Tibb.** | | | | | | | | | |
| CO1 | Explain Misri Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO1 | Describe the fundamental concepts of Misri Tibb. | Cognitive, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | I | |
| CO1 | Describe the Modes of treatment in Misri Tibb. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | I | |

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| CO1 | Identify the Source of information for Misri Tibb. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | I | |
| CO1 | Explain the contents & importance of Papyri. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | I | |
| **(c) Cheeni Tibb.** | | | | | | | | | |
| CO1 | Explain Cheeni Tibb. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Describe the fundamental concepts of Cheeni Tibb. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Identify the contributions of Ancient Cheeni Philosophers & Physicians. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Describe the special Modes of treatment & modes of investigations in Chinese Medicine. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | I | |
| **(d) Hindi Tibb/ Ayurveda.** | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|
| CO1 | Explain Hindi Tibb/Ayurveda. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Describe the fundamental concepts of Ayurveda. | Cognitive, Recall | MK | Know | Lecture/ Demonstartion | Written/Viva | F&S | I | |
| CO1 | Describe the modes of investigation & special modes of treatment used in Ayurveda. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Identify the Source of information for Ayurveda & Important Ayurvedic Physicians. | Cognitive, Recall | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | I | |
| **(e) Irani Tibb aur Madrasa Jundi Shapur.** | | | | | | | | | |
| CO1 | Explain Qadeem Irani Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Describe the fundamental concepts & Modes of treatment in Qadeem Irani Tibb. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | I | |

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| CO1 | Describe the Establishment of Madrasa Jundi Shapur. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1 | Identify the contributions of Madrasa Jundi Shapur and important physicians associated with it. | Cognitive, Comprehension | MK | Know | Lecture/Group Discussion | Written/Viva | F&S | I | |
| **(f) Unani Tibb.** | | | | | | | | | |
| CO1, CO2 | Explain Unani Tibb. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO1,CO 2 | Describe the fundamental concepts &Modes of treatment in Unani Tibb. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | I | |
| **TOPIC 3- UNANI TIBB MA QABLE BUQRAT** (Lecture:- **1** hours, Non lecture **2** hours) | | | | | | | | | |
| CO2 | Describe the Origin of Medicine in Ancient Greece. | Cognitive, Comprehension | MK | Know | Lecture/ Educational Videos | Written/Viva | F&S | I | |
| CO2 | Explain the Medical practices of Pre Hippocratic era. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | I | |
| **(a) Asqalibiyoos.** | | | | | | | | | |

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| CO2 | Describe Tabeeb-e-awwal, Asqalibiyoos & his temple practice. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| **TOPIC 4- BUQRAT AUR USKE BAAD KE UNANI ATIBBA** (Lecture:- **3** hours, Non lecture **6** hours) | | | | | | | | | |
| CO2 | Distinguish between Hippocratic & Post Hippocratic era of Unani Tibb. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | I | |
| **(a) Buqrat (Hippocrates).** | | | | | | | | | |
| CO2 | Describe the life history of Buqrat | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO2 | Describe the contributions of Buqrat. | Cognitive, Comprehension | MK | Know | Lecture/ Educational Video | Written/Viva | F&S | I | |
| **(b) Arastu (Aristotle).** | | | | | | | | | |
| CO2 | Describe the life history of Arastu. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | I | |

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| CO2 | Describe the philosophies Arastu related to Unani Medicine. | Cognitive, Comprehension | MK | Know | Lecture/ Symposium | Written/ Viva | F&S | I | |
| **(c) Herofiloos.** | | | | | | | | | |
| CO2 | Describe the Life history of Herofiloos. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO2 | Describe the contributions of Herofiloos. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | I | |
| **(d) Erasistratoos.** | | | | | | | | | |
| CO2 | Describe the Life history of Erasistratoos. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO2 | Describe the contributions of Erasistratoos. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | I | |
| **(e) Madrasa Askandriya.** | | | | | | | | | |
| CO2 | Explain the importance of Madrasa Askandriya and its contributions. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | I | |
| **TOPIC-5 ROOMI TIBB AUR BAZANTINI TIBB** (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |

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| CO2 | Describe Roomi Tibb and its important aspects. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO2 | Describe Bazantini Tibb and famous physician associated with it. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F | I | |
| **(a) Desqooridoos (Diascorides).** | | | | | | | | | |
| CO2 | Explain life history of Desqooridoos. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO2 | Describe the contributions of Desqooridoos. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO4 | Discover the importance of Kitabul Hashaish. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | I | |
| (b) **Jalinoos (Galen).** | | | | | | | | | |
| CO2 | Describe the life history of Jalinoos. | Cognitive, Recall | MK | Know | Lecture/ Educational Video | Written/ Viva | F&S | I | |
| CO2 | Describe the contributions of Jalinoos. | Cognitive, Comprehension | MK | Know | Lecture/Seminar | Written/ Viva | F&S | I | |
| CO4 | List important Medical text books of Jalinoos | Cognitive, Recall | MK | Know | Lecture/ Visit to Library | Written/ Viva | F&S | I | |

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| **TOPIC- 6 ARABI TIBB (Lecture-06 & Non Lecture-12)** | | | | | | | | | |
| CO3 | Explain Tibb in Arab. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contribution of Arabs in field of Medicine. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | I | |
| CO3 | Differentiate between Pre Islamic & Post Islamic Arabi Tibb. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| **i. Ahd-e- Jahiliyat:** | | | | | | | | | |
| CO3 | Describe Arabic medicine in Ahd-e-Jahiliyat. | Cognitive, Comprehension | MK | Know | Lecture | Written /Viva | F&S | I | |
| **(a) Haris bin Kilda.** | | | | | | | | | |
| CO3 | Discuss the life history & of Haris bin Kilda | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contributions of Haris bin Kilda. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| **ii. Tibb-e-Nabwi:** | | | | | | | | | |
| CO3 | Explain the importance of Tibb-e-Nabwi. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Summarize the important aspects | Cognitive, Comprehension | MK | Know | Lecture/ Seminar | Written/Viva | F&S | I | |

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| | regarding health, disease& treatment in Tibb-e-Nabwi. | | | | | | | | |
| **iii. Umwi Daur:** | | | | | | | | | |
| CO3 | Describe the development of medicine in Umwi daur. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| **(a) Jabir bin Hayyan.** | | | | | | | | | |
| CO3 | Discusslife history of Jabir bin Hayyan. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contributions of Jabir bin Hayyan. | Cognitive, Comprehension | MK | Know | Lecture/Demonstration | Written/Viva | F&S | I | |
| **(b) Khalid bin Yazeed.** | | | | | | | | | |
| CO3 | Discuss life history & of Khalid bin Yazeed. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contributions of Khalid bin Yazeed. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| **iv.Ahde Abbasi:**<br>**(a) Baitul Hikmat.** | | | | | | | | | |
| CO3 | Discuss the Establishment and contributions of Baitul Hikmat in the field of Medicine. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | List translations & compilations done in | Cognitive, Recall | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | I | |

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| | Baitul Hikmat. | | | | | | | | |
| CO3 | State the names of famous mutarjimeen of Ahde Abbasi. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | I | |
| **(b) Yohanna bin Masawayh.** | | | | | | | | | |
| CO3 | Discuss life history ofYohanna bin Masawayh. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contributions of Yohanna bin Masawayh. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | I | |
| **(c) Hunain bin Ishaq.** | | | | | | | | | |
| CO3 | Discuss life history of Hunain bin Ishaq | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | I | |
| CO3 | Describe the contributions of Hunain bin Ishaq. | Cognitive, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | I | |
| **(d) Sabit bin Qurra.** | | | | | | | | | |
| CO3 | Discusslife history of Sabit bin Qurra. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | I | |
| CO3 | Describe the contributions of Sabit bin Qurra. | Cognitive, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | I | |
| **(e) Yaqoob bin Ishaq.** | | | | | | | | | |
| CO3 | Discuss life history of Yaqoob bin Ishaq | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | I | |

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| CO3 | Describe the contributions of Yaqoob bin Ishaq. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | I | |
| **(f) Qusta bin Luqa.** | | | | | | | | | |
| CO3 | Discuss life history of Qusta bin Luqa. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | I | |
| CO3 | Describe the contributions of Qusta bin Luqa. | Cognitive, Comprehension | MK | Know | Lecture | Written/Viva | F&S | I | |
| **(g) Jibrayeel bin Bakhtishu.** | | | | | | | | | |
| CO3 | Discuss life history and contributions of Jibrayeel bin Bakhtishu. | Cognitive, Recall | NK | Know | Lecture | Written/Viva | F | I | |
| **(h) Baghdad mein Hindustani Atibba ki Aamad aur Ayurvedic kitabon ke Tarjume.** | | | | | | | | | |
| CO3 | Describe the arrival of ayurvedic physicians in Baghdad & translations of Ayurvedic text into Arabic. | Cognitive, Recall | DK | Know | Lecture/ Educational Video | Written/Viva | F | I | |
| **TOPIC-7- TIBB QUROONE USTA MEIN** (Lecture:- **8** hours, Non lecture **16** hours) | | | | | | | | | |
| **(a) Ali bin Rabban Tabri.** | | | | | | | | | |
| CO3 | Describe life history of Ali bin Rabban Tabri. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ali | Cognitive, Comprehension | MK | Know | Lecture / Group Discussion | Written/ Viva | F&S | II | |

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| | bin Rabban Tabri. | | | | | | | | |
| CO4 | Explain the importance & contents of Firdausul Hikmat fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(b) Ahmad bin Mohammad Tabri.** | | | | | | | | | |
| CO3 | Describe life history of Ahmad bin Mohammad Tabri. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ahmad bin Mohammad Tabri. | Cognitive, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Moalijat-e–Buqratiya. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(c) Mohammad bin Zakariya Razi.** | | | | | | | | | |
| CO3 | Describelife history of Mohammad bin Zakariya Razi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Mohammad bin Zakariya Razi. | Cognitive, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitab al Hawi fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Symposium | Written/ Viva | F&S | II | |
| **(d)Ali bin Abbas Majoosi.** | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|
| CO3 | Describe life history of Ali bin Abbas Majoosi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions ofAli bin Abbas Majoosi. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kamil us Sana'at fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Visit to Library | Written/ Viva | F&S | II | |
| **(e)Ibn-e-Sina (Avicenna).** | | | | | | | | | |
| CO3 | Describe life history of Ibn-e-Sina. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-e-Sina. | Cognitive, Comprehension | MK | Know | Lecture / Seminar | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Al-Qanoon fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Group Discussion /Vist to Library | Written/ Viva | F&S | II | |
| **(f) Abu Mansoor Nooh al Qamri.** | | | | | | | | | |
| CO3 | Describe life history of Abu Mansoor Nooh al Qamri. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Abu Mansoor Nooh al Qamri. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the | Cognitive, Recall, | MK | Know | Lecture | Written/ | F&S | II | |

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|---|---|---|---|---|---|---|---|---|---|
| | importance & contents of Ghana Mana. | Comprehension | | | | Viva | | | |
| **(g) Abu Sahal Masihi.** | | | | | | | | | |
| CO3 | Describe life history of Abu Sahal Masihi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Abu Sahal. Masihi. | Cognitive, Comprehension | MK | Know | Lecture / Group Discussion | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Mi'at fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Symposium | Written/ Viva | F&S | II | |
| **(h) Ismail Jurjani.** | | | | | | | | | |
| CO3 | Describe life history of Ismail Jurjani. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ismail Jurjani. | Cognitive, Comprehension | MK | Know | Lecture / Tutorial | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Zakheera Khwarzam Shahi. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Visit to Library | Written/ Viva | F&S | II | |
| **(i) Najeebuddin Samarqandi.** | | | | | | | | | |
| CO3 | Describe life history of Najeebuddin Samarqandi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the | Cognitive, | MK | Know | Lecture/ | Written/ | F&S | II | |

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| | contributions of Najeebuddin Samarqandi. | Comprehension | | | Demonstration | Viva | | | |
| CO4 | Explain the importance & contents of Asbab wa Alamat. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Visit to Library | Written/ Viva | F&S | II | |
| **(j) Alauddin Qarshi.** | | | | | | | | | |
| CO3 | Describe life history of Alauddin Qarshi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3, CO4 | Describe the contributions of Alauddin Qarshi. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Group Discussion | Written/ Viva | F&S | II | |
| **(k) Nafees bin Awz Kirmani.** | | | | | | | | | |
| CO3 | Describe life history of Nafees bin Awz Kirmani. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3,CO 4 | Describe the contributions ofNafees Bin Awz Kirman. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | II | |
| **(l) Ali bin Isa Kahhal.** | | | | | | | | | |
| CO3 | Describe life history of Ali bin Isa Kahhal. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3,CO 4 | Describe the contributions of Ali bin Isa Kahhal. | Cognitive, Recall, Comprehension | MK | Know | Lecture /Demonstration | Written/ Viva | F&S | II | |
| **(m) Ibn-e- Hubal Baghdadi.** | | | | | | | | | |

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| CO3 | Describe life history of Ibn-e- Hubal Baghdadi. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-e-Hubal Baghdadi. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul. Mukhtarat fil Tibb. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | II | |
| **(n) Ibn-e- Jazla.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-e- Jazla. | Cognitive, Recall | NK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3, CO4 | Describe the contributions of Ibn-e-Jazla. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(o) Ibn-e-Butlan.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-e- Butlan. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3, CO4 | Describe the contributions of Ibn-e-Butlan. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(p) Abdul Lateef Baghdadi.** | | | | | | | | | |
| CO3 | Describe life history of Abdul Lateef Baghdadi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3, | Describe the | Cognitive, | MK | Know | Lecture / | Written/ | F&S | II | |

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| CO4 | contributions of Abdul Lateef Baghdadi. | Comprehension | | | Demonstration | Viva | | | |
| **(q) Kamaluddin Irani.** | | | | | | | | | |
| CO3 | Describe life history of Kamaluddin Irani | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3, CO4 | Describe the contributions of Kamluddin Irani. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(r) Mahmood Aamli.** | | | | | | | | | |
| CO3 | Describe life history of Mahmood Aamli. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Mahmood Aamli. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **TOPIC-08- ATIBBA UNDULUS** (Lecture:- **3** hours, Non lecture **6** hours) | | | | | | | | | |
| **(a) Ibn-e-Rushd.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-e- Rushd. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-e-Rushd. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Kulliyat. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |

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| **(b) Abul Qasim Zahrawi.** | | | | | | | | | |
| CO3 | Describe life history of Abul Qasim Zahrawi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Abul Qasim Zahrawi. | Cognitive, Comprehension | MK | Know | Lecture/ Symposium | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Tasreef. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **(c) Ibn-e-Khateeb.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-e- Khateeb. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3,CO 4 | Describe the contributions of Ibn-e-Khateeb. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(d) Ibn-e-Baitar.** | | | | | | | | | |
| CO3 | Describe the life history of Ibn-e-Baitar. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-e-Baitar. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Jameul Mufradat. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(e) Ibn-e-Zuhr.** | | | | | | | | | |
| CO3 | Describe life history | Cognitive, Recall | DK | Know | Lecture | Written/ | F&S | II | |

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| | of Ibn-e- Zuhr. | | | | | Viva | | | |
| CO3 | Describe the contributions of Ibn-e-Zuhr. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Taiseer. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **TOPIC-09 - ATIBBA MISR-O-SHAM** (Lecture:- **2** hours, Non lecture **4** hours) | | | | | | | | | |
| **(a) Dawood Antaki.** | | | | | | | | | |
| CO3 | Describe life history of Dawood Antaki. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Dawood Antaki. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Tazkira. | Cognitive, Recall, Comprehension | NK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **(b) Ibn-al-Haysham.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-al –Haysham. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-al- Haysham. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Manazir. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |

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| **(c) Ibn-al-Qaf Masihi.** | | | | | | | | | |
| CO3 | Describe life history of Ibn-al- Qaf Masihi. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ibn-al-Qaf Masihi. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of Kitabul Umda fil Jarahat. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **(d) Ishaq bin Sulaiman Israili.** | | | | | | | | | |
| CO3 | Describe life history of Ishaq bin Sulaiman Israili. | Cognitive, Recall | NK | Know | Lecture | Written/ Viva | F&S | II | |
| CO3 | Describe the contributions of Ishaq bin Sulaiman Israili. | Cognitive, Comprehension | DK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **TOPIC-10 - TIBBE UNANI HINDUSTAN ME** (Lecture:- **10** hours, Non lecture **20** hours) | | | | | | | | | |
| **i) Ahd-e –Tughlaq:** **(a)Zia Mohammad Masood Rasheed Zangi.** | | | | | | | | | |
| CO5 | Describe life history of Zia Mohammad Masood Rasheed Zangi. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance & contents of | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |

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| | Majmooa-e-Ziyai. | | | | | | | | |
| **ii) Ahd-e-Lodhi:**<br>**(a) Bahwa bin Khawas Khan.** | | | | | | | | | |
| CO5 | Describe life history of Bahwa bin Khawas Khan. | Cognitive, Recall | DK | Know | Lecture | Written | F&S | II | |
| CO4 | Explain the importance & contents Madinus Shifa Sikander Shahi. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **iii) Ahd-e-Mughliya:**<br>**(a) Hakim Ali Gilani.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Ali Gilani. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5, CO4 | Describe the contributions of Hakim Ali Gilani. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| **(b) Hakim Sadra.** | | | | | | | | | |
| CO5 | Describelife history of Hakim Sadra. | Cognitive, Recall | NK | Know | Lecture | Viva | F | II | |
| CO4, CO5 | Describe the contributions of Hakim Sadra. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(c) Hakim Amanullah Khan.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Amanullah Khan. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions of | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |

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| | Hakim Amanullah Khan. | | | | | | | | |
| CO4 | Explain the importance & contents Ganj badawar/Qarabadeen-e-Khan Zamani. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| **(d) Hakim Akbar Arzani.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Akbar Arzani. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Akbar Arzani. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **(e)Hakim Hashim Alwi Khan.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Hashim Alwi Khan. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F& S | II | |
| CO4, CO5 | Describe the contributions of Hakim Hashim Alwi Khan. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(f) Hakim Yusufi.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Yusufi. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Yusufi. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(g) Hakim Shareef Khan.** | | | | | | | | | |
| CO5 | Describe life history | Cognitive, Recall | MK | Know | Lecture | Written/ | F&S | II | |

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| | of Hakim Shareef Khan. | | | | | Viva | | | |
| CO4, CO5 | Describe the contributions of Hakim Shareef Khan. | Cognitive, Recall, Comprehension | MK | Know | Lecture / Demonstration | Written/ Viva | F&S | II | |
| **iv. Qutubshahi Daur:** **(a) Hakim Mir Momin.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Mir Momin. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Mir Momin. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Demonstration | Written/ Viva | F&S | II | |
| **(b) Hakim ul Mulk Nizamuddin Gilani.** | | | | | | | | | |
| CO5 | Describe life history of Hakim ul mulk Nizamuddin Gilani. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim ul mulk Nizamuddin Gilani. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **v. Nizamshahi Daur:** **(a) Rustam Jurjani.** | | | | | | | | | |
| CO5 | Describe life history of Rustam Jurjani. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Rustam Jurjani. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain theimportance and | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |

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| | contents of Zakheera Nizamshahi. | | | | | | | | |
| **(b) Hakim Wali Gilani.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Wali Gilani. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Wali Gilani. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **vi. Aadilshahi Daur:** **(a) Abul Qasim Farishta.** | | | | | | | | | |
| CO5 | Describe life history of Abul Qasim Farishta. | Cognitive, Recall | NK | Know | Lecture | Written/ Viva | F | II | |
| CO4, CO5 | Describe the contributions of Abul Qasim Farishta. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance and contents of Akhtiyarat-e- Qasmi. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **vii. Aasif Jahi Daur:** **(a) Hakim Raza Ali Khan.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Raza Ali Khan. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Raza Ali Khan. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the | Cognitive, Recall, | MK | Know | Lecture/ | Written/ | F&S | II | |

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| | importance and contents of Yadgar-e-Razai. | Comprehension | | | Demonstration | Viva | | | |
| **(b) Hakim Shafai Khan.** | | | | | | | | | |
| CO5 | Describelife history of Hakim Shafai Khan. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Hakim Shafai Khan. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance and contents of Ilajul Atfal. | Cognitive, Recall, Comprehension | MK | Know | Lecture/ Symposium | Written/ Viva | F&S | II | |
| **viii. Gujrat Ka Mashhoor Tabeeb:** **(a) Shahab Abdul Kareem Nagowri.** | | | | | | | | | |
| CO5 | Describe life history of Shahab Abdul Kareem Nagowri. | Cognitive, Recall | DK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4, CO5 | Describe the contributions of Shahab Abdul Kareem Nagowri. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO4 | Explain the importance and contents of Tibb-e-Shahabi. | Cognitive, Recall, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **ix. Bartanawi Ahad:** **(a) Hakim Ajmal Khan.** | | | | | | | | | |
| CO5 | Describe life history | Cognitive, Recall | MK | Know | Lecture | Written/ | F&S | II | |

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| | of Hakim Ajmal Khan. | | | | | Viva | | | |
| CO4, CO5 | Describe the contributions of Hakim Ajmal Khan. | Cognitive, Comprehension | MK | Know | Lecture/ Seminar | Written/ Viva | F&S | II | |
| **(b) Hakim Abdul Aziz Lucknawi.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Abdul Aziz Lucknawi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions of Hakim Abdul Aziz Lucknawi. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| **(c) Hakim Azam Khan.** | | | | | | | | | |
| CO5 | Describelife history of Hakim Azam Khan. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Azam Khan. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | II | |
| CO4, CO5 | List the important books of Hakim Azam Khan. | Cognitive, Recall | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | II | |
| **(d) Hakim Abdul Hameed.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Abdul Hameed. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Abdul Hameed. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(e) Abdul Lateef Falsafi.** | | | | | | | | | |

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| CO5 | Describe life history of Hakim Abdul Lateef Falsafi. | Cognitive, Recall | MK | Know | Lecture/ | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Abdul Lateef Falsafi. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/ Viva | F&S | II | |
| **(f) Hakim Abdul Haleem Lucknawi.** | | | | | | | | | |
| CO5 | Describelife history of Hakim Abdul Haleem Lucknawi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Abdul Haleem lucknawi. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **(g) Hakim Ahmad Hussain Usmani.** | | | | | | | | | |
| CO5 | Describelife history of Hakim Ahmad Hussain Usmani. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Ahmad Hussain Usmani. | Cognitive, Comprehension | MK | Know | Lecture | Written/ Viva | F&S | II | |
| **x. Chand Digar Mashhoor Atibba:**<br>**(a) Hakim Mohammad Kabiruddin.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Mohammad Kabiruddin. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Mohammad | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/ Viva | F&S | II | |

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| | Kabiruddin. | | | | | | | | |
| **(b) Hakim Ghulam Hasnain Kintoori.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Ghulam Hasnain Kintoori. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Ghulam Hasnain Kintoori | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | II | |
| **(c) Hakim Mohammad Ilyas Khan.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Mohammad Ilyas Khan. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Mohammad Ilyas Khan. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | II | |
| **(d) Hakim Abdul Hameed Dehlvi.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Abdul Hameed Dehlvi. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the contributions Hakim Abdul Hameed Dehlvi. | Cognitive, Comprehension | MK | Know | Lecture / Group Discussion | Written/ Viva | F&S | II | |
| **(d) Hakim Abdul Razzaq.** | | | | | | | | | |
| CO5 | Describe life history of Hakim Abdul Razzaq. | Cognitive, Recall | MK | Know | Lecture | Written/ Viva | F&S | II | |
| CO5 | Describe the | Cognitive, | MK | Know | Lecture | Written/ | F&S | II | |

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| | contributions Hakim Abdul Razzaq. | Comprehension | | | | Viva | | | |
| **TOPIC-11 - HINDUSTAN KE MASHOOR TIBBI KHANWADE** (Lecture:- **2** hours, Non lecture **4** hours)<br>**(a) Khandan-e-Shareefi.** | | | | | | | | | |
| CO5 | List the Famous Physicians of Khandan-e- Shareefi. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO5 | Discuss the contributions of Khandan-e- Shareefi. | Cognitive, Comprehension | MK | Know | Lecture / Group Discussion | Written/Viva | F&S | III | |
| **(b) Khandan-e-Azeezi.** | | | | | | | | | |
| CO5 | List the Famous Physicians of Khandan-e-Azeezi. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO5 | Discuss the contributions of Khandan-e-Azeezi. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **(c) Khandan-e-Usmani.** | | | | | | | | | |
| CO5 | List Famous Physicians of Khandan-e- Usmani. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO5 | Discuss the contributions of Khandan-e- Usmani. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **TOPIC-12- HINDUSTAN MEIN TIBB-E-UNANI KE FAROGH MEIN DARSGAHON KA KIRDAR** (Lecture:- **2** hours, Non lecture **4** hours)<br>**(a) Ayurvedic & Unani Tibbi College, Karol Bagh,Delhi.** | | | | | | | | | |
| CO6 | Describe the historical background of Ayurvedic & Unani | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |

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| | Tibbi College, Delhi. | | | | | | | | |
| CO6 | Discuss the importance of Ayurvedic & Unani Tibbi College, Delhi. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **(b) Ajmal Khan Tibbiya College, Aligarh.** | | | | | | | | | |
| CO6 | Describe the historical background of Ajmal Khan Tibbiya College, Aligarh. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of Ajmal Khan Tibbiya College, Aligarh. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **(c) Takmeelut Tibb College, Lucknow.** | | | | | | | | | |
| CO6 | Describe the historical background of Takmeelut Tibb College, Lucknow. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of Takmeelut TibbCollege, Lucknow. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **(d) State Unani Medical College, Prayagraj.** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO6 | Describe the historical background of State Unani Medical College, Prayagraj. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of State Unani Medical College Prayagraj. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **(e) Government Unani Medical College, Patna.** | | | | | | | | | |
| CO6 | Describe the historical background of Government Unani Medical College, Patna. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of Government Unani Medical College, Patna. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **(f) Jamia Tibbiya/ School of Unani Medical Education &Research, Jamia Hamdard, New Delhi.** | | | | | | | | | |
| CO6 | Describe the historical background of Jamia Tibbiya/ School of Unani Medical Education & Research, Jamia Hamdard, New Delhi. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of Jamia | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tibbiya/ School of Unani Medical Education & Research, Jamia Hamdard, New Delhi. | | | | | | | | |
| **(g) Nizamia Tibbiya College, Hyderabad.** | | | | | | | | | |
| CO6 | Describe the historical background of Nizamia Tibbiya College, Hyderabad. | Cognitive, Recall | DK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Discuss the importance of Nizamia Tibbiya College, Hyderabad. | Cognitive, Comprehension | MK | Know | Lecture/ Tutorial | Written/Viva | F&S | III | |
| **TOPIC-13.HINDUSTAN MEIN TIBB-E-UNANI KE INTEZAMI WA TEHQIQI SHOBE'JAAT AUR UNKI AHAM KARGUZARIYAN** (Lecture:- **2** hours, Non lecture **4** hours)<br>**(a) AYUSH** | | | | | | | | | |
| CO6 | Describe historical background of AYUSH. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Describe roles and responsibilities of AYUSH. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | III | |
| **(b) NCISM** | | | | | | | | | |
| CO6 | Describe historical background of NCISM. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Describe Aims & Objectives of NCISM. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | III | |
| **(c) CCRUM** | | | | | | | | | |
| CO6 | Describe historical | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | background of CCRUM. | | | | | | | | |
| CO6 | Describe Aims & Objectives of CCRUM. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **(d) NIUM** | | | | | | | | | |
| CO6 | Describe historical background of NIUM. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Describe Aims & Objectives of NIUM. | Cognitive, Comprehension | MK | Know | Lecture/ Symposium | Written/Viva | F&S | III | |
| **(e) TKDL** | | | | | | | | | |
| CO6 | Describe historical background of TKDL. | Cognitive, Recall | MK | Know | Lecture | Written/Viva | F&S | III | |
| CO6 | Describe Aims & Objectives of TKDL. | Cognitive, Comprehension | MK | Know | Lecture/ Demonstration | Written/Viva | F&S | III | |
| **TOPIC-14 TIBBI AKHLAQIYAT** (Lecture:- **4** hours, Non lecture **8** hours) **(a) Fanne Tibb ki Azmat wa Sharafat.** | | | | | | | | | |
| CO7 | Describe fanne Tibb ki Azmat wa Sharafat. | Cognitive, Comprehension | MK | Know | Lecture/ /Group Discussion | Written/ Viva | F&S | III | |
| CO7 | Illustrate the importance and responsibilities of Atibba. | Cognitive, Comprehension, Affective | MK | Know | Lecture/ Tutorial | Written/ Viva | F&S | III | |
| **(c) Tibbi Akhlaqiyat.** | | | | | | | | | |
| CO7 | Discuss importance of Tibbi Akhlaqiyat. | Cognitive, Comprehension | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| CO7 | Use Tibbi Aklaqiyat in medical practice. | Cognitive, Comprehension, Application | MK | Know | Lecture/ Symposium | Written/Viva | F&S | III | |
| **(c) Muaheda-e-Buqratiya aur uska pas Manzar.** | | | | | | | | | |
| CO7 | Describe Muaheda-e- | Cognitive, | MK | Know | Lecture/ | Written/Viva | F&S | III | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Buqratiya. | Recall,Affective | | | Demonstration | | | | |
| CO7 | Discuss historical background of Muaheda-e-Buqratiya. | Cognitive, Comprehension | MK | Know | Lecture/ Symposium | Written/Viva | F&S | III | |
| **(d)Muaheda-e-Buqratiya ke Matan Ka Urdu Tarjuma.** | | | | | | | | | |
| CO7 | Explain Muaheda-e-Buqratiya ke matan ka Urdu Tarjuma. | Cognitive, Comprehension | MK | Know | Lecture/Demonstration | Written/Viva | F&S | III | |
| **(e) Atibba ke Aausaf.** | | | | | | | | | |
| CO7 | Describe characteristics of Atibba. | Cognitive, Comprehension,Affective | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **(h) Mutallameen-e-Tibb Ke Aausaf.** | | | | | | | | | |
| CO7 | Describe characteristics of mutallameen-e-Tibb. | Cognitive, Comprehension, Affective | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **(i) CCIM ka Marattab karda zabta-e-Akhlaq barae Tabeeb.** | | | | | | | | | |
| CO7 | Describe zabta-e-Akhlaq constituted by CCIM for physicians. | Cognitive, Comprehension, Affective | MK | Know | Lecture/ Symposium | Written/Viva | F&S | III | |
| CO7 | Describe &Use CCIM ka zabta akhlaq in medical practice. | Cognitive, Comprehension, Affective | NK | Know | Lecture / Group Discussion | Written/Viva | F&S | III | |
| **(j) Unani Atibba ke Akhtiyarat.** | | | | | | | | | |
| CO7 | Describe Unani Atibba ke Akhtiyarat. | Cognitive, Comprehension, Affective | MK | Know | Lecture/ Group Discussion | Written/Viva | F&S | III | |
| **(i) Ghair Akhlaqi Tababat.** | | | | | | | | | |
| CO7 | Describe Ghair Akhlaqi Tababat. | Cognitive, Recall, Affective | MK | Know | Lecture/ Group Discussion | Written/ Viva | F&S | III | |

**Table 4 Learning objectives (Practical) Not applicable**

**Table 5- Non Lecture Activities of Tareekhe Tib UNIUG-TT**

| Sr No | List non lecture Teaching-Learning methods | No of Activities |
|---|---|---|
| 1 | Demonstration through chart & models | 33 |
| 2 | Educational Video | 4 |
| 3 | Visit to Library | 3 |
| 4 | Tutorial | 18 |
| 5 | Seminar | 4 |
| 6 | Symposium | 9 |
| 7 | Group Discussion | 29 |
| **Total** | | **100** |

**Table 6: Assessment Summary**

## 6 A - Number of papers and Marks Distribution

| S.No. | SUBJECT | PAPERS | THEORY | PRACTICAL / CLINICAL ASSESSMENT | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | | | | PRACTICAL/ CLINICAL | VIVA | ELECTIVES | IA | TOTAL | |
| 1. | Tareekhe Tib (History of Medicine) | 1 | 100 | - | 30 | - | 20 | 50 | 150 |

## 6. B - Scheme of Assessment (formative and Summative)

| SR.NO. | PROFESSIONAL COURSE | DURATION OF PROFESSIONAL COURSE | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First | 3 PA & First TT | 3 PA & Second TT | 3 PA & UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

## 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) | Term Test (MCQ+SAQ+LAQ | Sub Total | Term Assessment |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | 20 | And Practical (Converted to 20) | | |
| FIRST | | | | | | D+E | D+E /2 |
| SECOND | | | | | | D+E | D+E /2 |
| THIRD | | | | | NIL | D | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 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. | Other activities explained in Table 3 Column G3 as per indicated term. |

## 6 E - Question Paper Pattern

**I PROFESSIONAL BUMS EXAMINATIONS**

**UNIUG-TT**

**PAPER (Theory)**

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

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ<br>(1Mark) | SAQ<br>(5 Marks) | LAQ<br>(10 Marks) |
| 1. | **(Tareekh-e-Tibb aur iski Ahmiyat) تاریخ طب اور اس کی اہمیت** | I | 10 | Yes | No | Yes |
| 2. | **فن طب کی ابتدا ءاور اس کے اولین مراکز**<br>**(Fanne Tibb ki Ibteda aur iske Awwaleen Marakiz)**<br>a. بابلی وآشوری طب(Babuli wa Aashuri Tibb)<br>b. مصری طب(Misri Tibb)<br>c. چینی طب(Cheeni Tibb)<br>d. ہندی طب/ آیورویدا(Hindi Tibb/Ayurveda)<br>e. ایرانی طب اور مدرسہ جندی شاپور(Irani Tibb aur Madrasa Jundi Shapur)<br>f. یونانی طب(Unani Tibb) | I | | | | |
| 3. | **یونانی طب ما قبل بقراط(Unani Tibb ma Qabl Buqrat)**<br>a. اسقلی بیوس(Asqalibiyoos) | I | 05 | Yes | Yes | No |
| 4. | **بقراط اور اس کے بعد کے یونانی اطباء**<br>**(Buqrat aur uske baad ke Unani Atibba)**<br>a. بقراط (Buqrat)<br>b. ارسطو (Arastu)<br>c. ہیروفیلوس (Herofiloos.)<br>d. ایراسسطراطوس (Erasistratoos)<br>e. مدرسہ اسکندریہ (Madrasa Askandriya) | I | 05 | Yes | Yes | No |
| 5. | **رومی طب اور بازنطینی طب (Roomi Tibb aur Bazantini Tibb)**<br>a. دیسقوریدوس (Desqooridoos)<br>b. جالینوس (Jalinoos) | I | 05 | Yes | Yes | No |
| 6. | **عربی طب(Arabi Tibb)**<br>**V. عہد جاہلیت (Ahd-e- Jahiliyat)**<br>a. حارث بن کلدہ (Haris bin Kilda)<br>**VI. طب نبوی (Tibb- e- Nabwi)**<br>**VII. دور اموی (Daur Umwi)**<br>a. جابربن حیان (Jabir bin Hayyan)<br>b. خالد بن یزید (Khalid bin Yazeed)<br>**VIII. عباسی دور (Abbasi Daur)**<br>a. بیت الحکمت (Baitul Hikmat) | I | 15 | Yes | Yes | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| | b. یوحنا بن ماسویہ (Yohanna bin Masawayh)<br>c. حنین بن اسحٰق (Hunain bin Ishaq)<br>d. ثابت بن قرہ (Sabit bin Qurra)<br>e. یعقوب بن اسحٰق (Yaqoob bin Ishaq)<br>f. قسطا بن لوقا (Qusta bin Luqa)<br>g. جبرائیل بن بختیشوع (Jibrayeel bin Bakhtishu)<br>h. بغداد میں ہندوستانی اطباء کی آمد اور آیورویدک کتابوں کے ترجمے<br>(Baghdad mein Hindustani Atibba ki Aamad aur Ayurvedic Kitabon ke Tarjume) | | | | | |
| **7.** | **طب قرون وسطیٰ میں (Tibb Quroon-e-Usta mein)**<br>a. علی بن ربن طبری (Ali bin Rabban Tabri)<br>b. احمد بن محمد طبری (Ahmad bin Mohammad Tabri)<br>c. محمد بن زکریارازی (Mohammad bin Zakariya Razi)<br>d. علی بن عباس مجوسی (Ali bin Abbas Majoosi)<br>e. ابن سینا (Ibn-e-Sina)<br>f. ابومنصورنوح القمری (Abu Mansoor Nooh al Qamri)<br>g. ابو سہل مسیحی (Abu Sahal Masihi)<br>h. اسماعیل جرجانی (Ismail Jurjani)<br>i. نجیب الدین سمرقندی (Najeebuddin Samarqandi)<br>j. علاء الدین قرشی (Alauddin Qarshi)<br>k. نفیس بن عوض کرمانی (Nafees bin Awz kirmani)<br>l. علی بن عیسیٰ کحال (Ali bin Isa Kahhal)<br>m. ابن ہبل بغدادی (Ibn-e-Hubal Baghdadi)<br>n. ابن جزلہ (Ibn-e-Jazla)<br>o. ابن بطلان (Ibn-e-Butlan)<br>p. عبد اللطیف بغدادی (Abdul Lateef Baghdadi)<br>q. کمال الدین ایرانی (Kamaluddin Irani)<br>r. محمود آملی (Mahmood Aamli) | **II** | **15** | **Yes** | **Yes** | **Yes** |
| **8.** | **اطباء اندلس(Atibba Undulus)**<br>a. ابن رشد (Ibn-e-Rushd)<br>b. ابوالقاسم زہراوی (Abul Qasim Zahrawi)<br>c. ابن خطیب (Ibn-e-Khateeb)<br>d. ابن بیطار (Ibn-e-Baitar)<br>e. ابن زہر (Ibn-e-Zuhr) | **II** | **05** | **Yes** | **Yes** | **No** |
| **9.** | **اطباء مصر و شام (Atibba Misr wa Sham)**<br>a. داؤد انطاکی (Dawood Antaki)<br>b. ابن ہیثم (Ibn-e-Haysham)<br>c. ابن القف مسیحی (Ibn-al-Qaf Masihi)<br>d. اسحٰق بن سلیمان اسرائیلی (Ishaq bin Sulaiman Israili) | **II** | **05** | **Yes** | **Yes** | **No** |
| **10.** | **طب یونانی ہندوستان میں (Tibb-e-Unani Hindustan main)**<br>**I. عہد تغلق (Ahd-e-Tughlaq)** | **II** | **15** | **Yes** | **Yes** | **Yes** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | a. ضیاء محمد مسعود رشید زنگی (Zia Mohammad Masood Rasheed Zangi)<br>**II. عہد لودھی (Ahd-e-Lodhi)**<br>a. بہوہ بن خواص خان (Bahwa bin Khawas Khan)<br>**III. عہد مغلیہ (Ahd-e-Mughliya)**<br>a. حکیم علی گیلانی (Hakim Ali Gilani)<br>b. حکیم صدرا (Hakim Sadra)<br>c. حکیم امان اللہ خان (Hakim Amanullah Khan)<br>d. حکیم اکبر ارزانی (Hakim Akbar Arzani)<br>e. حکیم ہاشم علوی خان (Hakim Hashim Alwi Khan)<br>f. حکیم یوسفی (Hakim Yusufi)<br>g. حکیم شریف خان (Hakim Shareef Khan)<br>**IV. قطب شاہی دور (Qutub Shahi Daur)**<br>a. حکیم میر مومن (Hakim Mir Momin)<br>b. حکیم الملک نظام الدین گیلانی (Hakim-ul-mulk Nizamuddin Gilani)<br>**V. نظام شاہی دور (Nizam Shahi Daur)**<br>a. رستم جرجانی (Rustam Jurjani)<br>b. حکیم ولی گیلانی (Hakim Wali Gilani)<br>**VI. عادل شاہی دور (Aadil Shahi Daur)**<br>a. ابوالقاسم فرشتہ(Abul Qasim Farishta)<br>**VII. آصف جاہی دور (Aasif Jahi Daur)**<br>a. حکیم رضاعلی خان (Hakim Raza Ali khan)<br>b. حکیم شفائی خان (Hakim Shafai Khan)<br>**VIII. گجرات کا مشہورطبیب (Gujrat ka Mashhoor Tabeeb)**<br>a. شہاب عبد الکریم ناگوری (Shahab Abdul Kareem Nagowri)<br>**IX. برطانوی عہد (Bartanawi Ahad)**<br>a. حکیم اجمل خان (Hakim Ajmal khan)<br>b. حکیم عبد العزیزلکھنوی (Hakim Abdul Aziz Lucknawi)<br>c. حکیم اعظم خان (Hakim Azam khan)<br>d. حکیم عبد الحمید ( Hakim Abdul Hameed)<br>e. حکیم عبد الطیف فلسفی (Hakim Abdul Lateef Falsafi)<br>f. حکیم عبد الحلیم لکھنوی (Hakim Abdul Haleem Lucknawi)<br>g. حکیم احمد حسین عثمانی(Hakim Ahmad Husain Usmani)<br>**X. چند دیگر مشہور اطباء(Chand Digar Mashhoor Atibba)**<br>a. حکیم محمد کبیرالدین (Hakim Mohammad Kabiruddin)<br>b. حکیم غلام حسنین کنتوری (Hakim Ghulam Hasnain Kintoori)<br>c. حکیم محمد الیاس خان ( Hakim Mohammd Ilyas khan)<br>d. حکیم عبدالحمید دہلوی (Hakim Abdul Hameed Dehlvi)<br>e. حکیم عبد الرزاق (Hakim Abdul Razzaq) | | | | | |
| **11.** | **ہندوستان کے مشہور طبّی خانوادے**<br>**(Hindustan ke Mashoor Tibbi Khanwade)**<br>a. خاندان شریفی (Khandan-e-Shareefi) | **III** | **05** | **Yes** | **Yes** | **No** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | b. خاندان عزیزی (Khandan-e-Azeezi)<br>c. خاندان عثمانی (Khandan-e-Usmani) | | | | | |
| **12.** | **ہندوستان میں طب یونانی کے فروغ میں درس گاہوں کا کردار**<br>**(Hindustan mein Tibb-e-Unani ke Farogh mein Darsgahon ka Kirdar)**<br>a. اے اینڈ یو طبیہ کالج ،قرول باغ (A& U Tibbi College Karol Bagh Delhi)<br>b. اجمل خان طبیہ کالج ،علی گڑھ (Ajmal Khan Tibbiya College, Aligarh)<br>c. تکمیل الطب کالج، لکھنؤ (Takmeelut Tibb College,Lucknow)<br>d. اسٹیٹ یونانی میڈیکل کالج، پریاگراج (State Unani Medical College, Prayagraj)<br>e. گورنمنٹ یونانی میڈیکل کالج، پٹنہ (Government Unani Medical College, Patna)<br>f. جامعہ طبیہ /اسکول آف یونانی میڈیکل ایجوکیشن اینڈ ریسرچ ، جامعہ ہمدرد، نئی دہلی (Jamia Tibbiya/School of Unani Medical Education & Research, Jamia Hamdard, New Delhi)<br>g. نظامیہ طبیہ کالج ،حیدرآباد (Nizamia Tibbia College ,Hyderabad) | **III** | **05** | **Yes** | **Yes** | **No** |
| **13.** | **ہندوستان میں طب یونانی کے انتظامی و تحقیقی شعبۂ جات اور ان کی اہم کارگزاریاں**<br>**(Hindustan mein Tibb-e-Unani ke Intezami wa Tehqiqi Shobajat aur unki Aham Karguzariya)**<br>a. آیوش (AYUSH)<br>b. این۔سی۔آئی۔ایس۔ایم (NCISM )<br>c. سی۔سی۔آر۔یو۔ایم (CCRUM)<br>d. این۔آئی۔یو۔ایم (NIUM)<br>e. ٹی۔کے۔ڈی۔ایل (TKDL) | **III** | **05** | **Yes** | **Yes** | **No** |
| **14.** | **طبّی اخلاقیات (Tibbi Akhlaqiyat)**<br>a. فن طب کی عظمت اور شرافت (Fanne Tibb ki Azmat aur Sharafat)<br>b. طبّی اخلاقیات (Tibbi Akhlaqiyat)<br>c. معاہدہ بقراطیہ اور اس کا پس منظر (Muaheda-e-Buqratiya aur Uska pas Manzar)<br>d. معاہدہ بقراطیہ کے متن کا اردو ترجمہ (Muaheda-e-Buqratiya ke Matan ka Urdu Tarjuma)<br>e. اطباء کے اوصاف (Attiba ke Aausaf)<br>f. متعلمین طب کے اوصاف (Mutallmeen-e-Tibb ke Aausaf)<br>g. سی۔سی۔آئی۔ایم کے مرتب کردہ ضابطہ اخلاق برائے طبیب (CCIM ke Marattab karda Zabta-e-Akhlaq barae Tabeeb)<br>h. یونانی اطباء کے اختیارات (Unani Atibba ke Akhtiyarat)<br>i. غیر اخلاقی طبابت (Ghair Akhlaqi Tababat) | **III** | **05** | **Yes** | **Yes** | **No** |

## 6 G - Question Paper blueprint

| A<br>Question Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| .Q1 | **Multiple choice Questions (MCQ)**<br><br>20 Questions<br>1 mark each<br>All compulsory<br><br>Must know 15 MCQ<br>Desirable to know 3 MCQ<br>Nice to know 2 MCQ | 1. Topic number -1<br>2. Topic number-2<br>3. Topic number-3<br>4. Topic number-4<br>5. Topic number-5<br>6. Topic number-6<br>7. Topic number-7<br>8. Topic number-8<br>9. Topic number-9<br>10. Topic number-10<br>11. Topic number-11<br>12. Topic number-12<br>13. Topic number-13<br>14. Topic number-14<br>15. Topic number- 2<br>16. Topic number-4<br>17. Topic number-6<br>18. Topic number-7<br>19. Topic number-10<br>20. Topic number-13 |
| Q2 | **Short answer Questions (SAQ)**<br>Eight Questions<br>5 Marks Each<br>All compulsory<br>Must know 7 SAQ<br>Desirable to know 1 SAQ<br>No Questions on Nice to know | 1. Topic no. 3/ Topic no.4<br>2. Topic no.5<br>3. Topic no.7/ Topic no.6<br>4. Topic no.8/Topic no.9<br>5. Topic no.10<br>6. Topic no.11/12<br>7. Topic no.13<br>8. Topic no.14 |
| Q3 | **Long answer Questions (LAQ)**<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must know<br>No Questions on Nice to know and Desirable to know | 1. Topic no.2<br>2. Topic no.6<br>3. Topic no.7<br>4. Topic no.10 |

## 6 H - Distribution of Practical Examination

| SN | Heads | Marks |
|---|---|---|
| 1 | Viva Voce | 30 |
| 2 | Internal | 20 |
| 3 | Electives | -- |
| | **Total Marks** | **50** |

## Table 7. Reference Books/Resources:

| S.No | Name of the book | Language | Author/Translator |
|---|---|---|---|
| **1.** | عیون الانباءفی طبقات الاطباء<br>Uyunul Amba fil Tabqatul Atibba | Urdu | ابن ابی اصیبعہ/سی سی آر یو ایم<br>Ibn Abi Usaiba/CCRUM |
| **2.** | مختصر تاریخ الطب العربی<br>Mukhtasar Tareekh ut Tibb Al Arabi | Arabic | کمال سا مرائی<br>Kamal Samarrai |
| **3.** | طبقات الا طباءو الحکماء<br>Tabaqat Al Atibba wa Al Hukma | Urdu | ابن جلجل/حکیم عبد الباری<br>Ibne Juljul/ Hakim Abdul Bari |
| **4.** | اطبا ءاور ان کی مسیحا ئی<br>Atibba aur unki Masihai | Urdu | مختار احمد اصلاحی<br>Mukhtar Ahmad Islahi |
| **5.** | اطبا ءعہد مغلیہ<br>Atibba Ahde Mughliya | Urdu | کوثر چا ند پوری<br>Kausar Chandpuri |
| **6.** | تاریخ الا طباء<br>Tareekh al Atibba | Urdu | غلام جیلا نی<br>Ghulam Jilani |
| **7.** | بیت الحکمت کی طبّی خد مات<br>Baitul Hikmat ki Tibbi Khidmat | Urdu | وسیم احمد اعظمی<br>Wasim Ahmad Azmi |
| **8.** | تاریخ طب اور اطبا ءدور مغلیہ<br>Tareekhe Tibb aur Atibba daure Mughliya | Urdu | حکیم الطاف احمد اعظمی<br>Hakim Altaf Ahmad Azmi |
| **9.** | تاریخ طب (ابتدا تا عہد حاضر)<br>Tareekhe Tibb(Ibteda ta ahde Hazir) | Urdu | سید حسان نگرامی<br>Sayyed Hassan Nigrami |
| **10.** | تا ریخ طب و اخلاقیات<br>Tareekhe Tibb wa Akhlaqiyat | Urdu | اشہر قدیر<br>Ashhar Qadeer |
| **11.** | تاریخ طب و اطبا ءقدیم<br>Tareekhe Tibb wa Atibba Qadeem | Urdu | علی حیدر جعفری<br>Ali Haider Jafri |

| | | | |
|---|---|---|---|
| **12.** | طب یو نا نی اور ہندوستان<br>Tibbe Unani aur Hindustan | Urdu | اشہر قدیر<br>Ashhar Qadeer |
| **13.** | کلیات طب کے مصادر ومراجع<br>Kulliyat e tibb ke Masadir-o-Marajeh | Urdu | رضی الاسلام ندوی<br>Raziul Islam Nadwi |
| **14.** | طبّی صحائف<br>Tibbi Sahaif | Urdu | اشہر قدیر<br>Ashhar Qadeer |
| **15.** | رموز الا طباء<br>Rumooz Al Atibba | Urdu | محمد فیروز الدین<br>Mohammad Firozuddin |
| **16.** | تاریخ الحکماء<br>Tareekh al Hukma | Urdu | جمال الدین قفطی<br>Jamaluddin Qifti |
| **17.** | قرون وسطیٰ میں مسلمانوں کی علمی خد مات<br>Qaroon wasta mein Musalmano ki Ilmi Khidmat | Urdu | مولوی عبدالرحمٰن<br>Maulvi Abdur Rehman |
| **18.** | عہد جاہلیت میں عرب فن طب<br>Ahde Jahiliyat mein Arab Fanne Tibb | Urdu | ڈاکٹر غیاث الدین<br>Dr.Ghayasuddin |
| **19.** | تاریخ طب<br>Tareekhe Tibb | Urdu | آغا اشرف<br>Agha Ashraf |
| **20.** | ہندوستان میں طب یونانی کا آغاز و ارتقاء<br>Hindustan mein Tibb-e-Unani ka Aghaz wa Irtiqa | Urdu | حکیم الطاف احمد اعظمی<br>Hakim Altaf Ahmad Azmi |
| **21.** | طب العرب<br>Tibbul Arab | Urdu | ای جی براؤن/علی احمد نیّر واسطیٰ<br>E.G.Brown/Ali Ahmad Nayyar Wasti |
| **22.** | ہندوستان کے مشہور اطباء<br>Hindustan ke Mashhoor Atibba | Urdu | حکیم حافظ حبیب الرحمان<br>Hakim Hafiz Habibur Rahman |
| **23.** | Introduction to the History of Science | English | George Sarton |
| **24.** | History of Unani System of Medicine | English | Altaf Ahmad Azmi |
| **25.** | Unani Medical Literature Produced from Hippocratic Period (Fl. 462 BC) to 8th Century A.D. | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |
| **26.** | History and Accounts of Literature Written in Unani Medicine 9th to 12th Century | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |
| **27.** | Unani Medical Literature Produced from 13th Century to 16th Century | English | Ashfaque Ahmad<br>National Institute of Indian Medical Heritage, Hyderabad |

# USER MANUAL

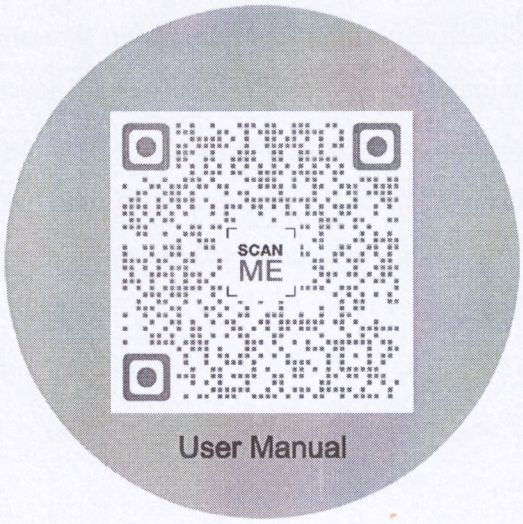
## COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS (PRESCRIBED BY NCISM)

**(Applicable from 2021-2022 batch onwards for five years or until further notification by NCISM, whichever is earlier)**

ncism

प्राणाभिसरः प्राणायतनानाम्

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



# COURSE CURRICULUM FOR FIRST PROFESSIONAL BUMS
# (PRESCRIBED BY NCISM)

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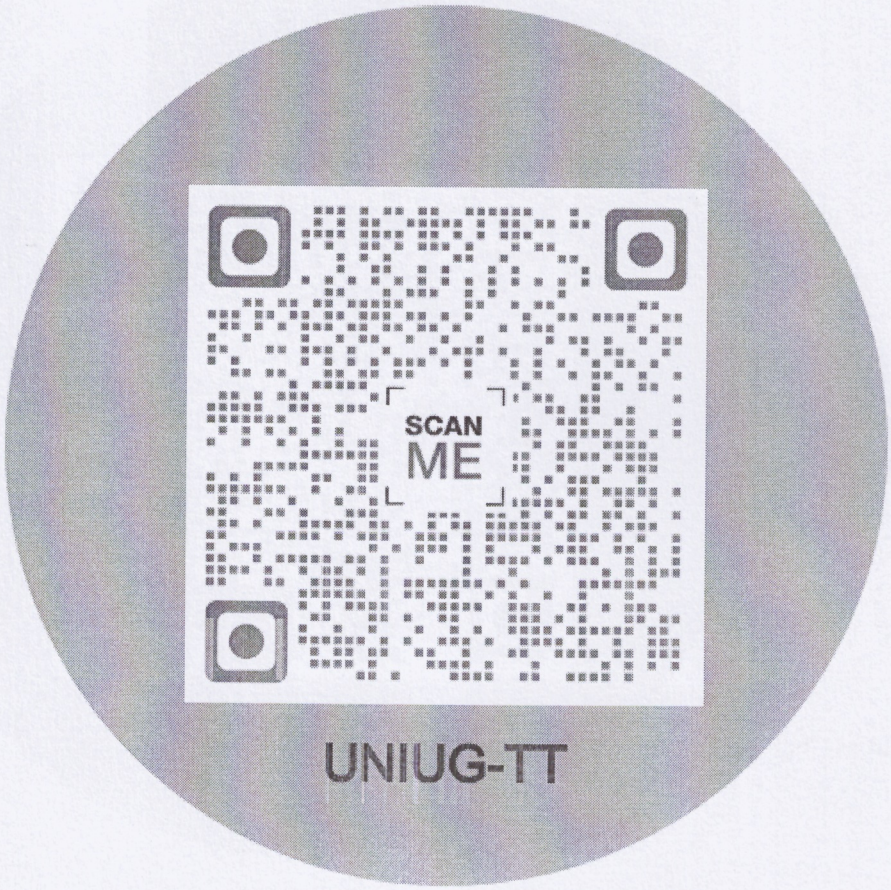
## (History of medicine)

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**NEW DELHI-110058**

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20/6/2023

20/6/2023

20/6/23

20/6/23

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**NEW DELHI-110058**

SCAN ME

User Manual

# National Commission for Indian System of Medicine

The National Commission for Indian System of Medicine is the statutory body constituted under NCISM Act, 2020 vide gazette notification extraordinary part (ii) section (i) dated 21.09.2020.

An Act..

- to provide for a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high quality medical professionals of Indian System of Medicine in all parts of the country;
- that promotes equitable and universal healthcare that encourages community health perspective and makes services of such medical professionals accessible and affordable to all the citizens;
- that promotes national health goals;
- that encourages such medical professionals to adopt latest medical research in their work and to contribute to research;
- that has an objective periodic and transparent assessment of medical institutions and facilitates maintenance of a medical register of Indian System of Medicine.
- for India and enforces high ethical standards in all aspects of medical services;
- that is flexible to adapt to the changing needs and has an effective grievance redressal mechanism and for matters connected therewith or incidental thereto

## Graduate Attributes(GA): -

| | |
|---|---|
| GA1 | **Profound Knowledge of Unani system of medicine and attitude**<br>كتاب القانون لا يسعمن يدعصناعة الطب ويكتسب بها ان لا يكون جله معلوما محفوظا عنده فإنه مشتمل على أقلما لابد منهللطبيب- **(القانون فی الطب)**<br>واجب است کہ طبیب سعی نماید درفہم اصول صناعت تاکہ متمکن باشد درفہم حدود امراض و علل و عرضیات آنہابداندومعرفتاجناسوانواعامراضحاصل نمایدواقتدار بر تقسیمات آنہا بخوبی باید-**(رموزاعظم)** |
| GA2 | **Competent and Skilled Unani Physician and Surgeon**<br>خبیرا بالعلاج واقســامہ وســائرتدابیرہ لحفظ الصــحۃ وازالۃ المرض، علما وعملا- قادرا علی التقدم بالانذار- **(ادب الطبیب)**<br>متمکن باشــد از تشــخیص کہ اســتخراج نماید دوارا از طبیعت مرض درکیفیت دوا از کیفیتمرض وکمیت دوا از کتب مفردات و استخراج مرض از قسمت مرض کند و استنباط ادویہ بقیاس ما خوذ از تاثیرات آنہا-<br>معالجہ بدوائےغذائی نکند تا آنکہ ممکن بغذا باشــد، اســتفراغ مادہ بطریق قویترنکندچون بطریق خفیف تر ممکن باشد مثل قے وحقنہ ازفصد وحجامت- **(رموز اعظم)** |
| GA3 | **Team spirit and Leadership**<br>جالینوس گوید کہ ہرگاہ طبیبرا احتیاج شود بمشورہ درامرے پس در بدایت مشورہ آن اوشبان بگیرد وعقب آن نیک بسوئے پیران ببر پس آنچہ در آنچہ در آن نیک ترباشد آن رااختیارکن- **(رموز اعظم)** |
| GA4 | **Critical thinker, problem solver and decision maker**<br>طبیب را کہ لطیف الخطاب، ذکی الحس، صائب الرائے، حاضر الخاطر باشد- **(رموزاعظم)** |
| GA5 | **Good Communicator and Counsellor**<br>ماهرا بمساءلۃ المریض اوخدمہ علی ترتیب طبیعی-**(ادب الطبیب)** |
| GA6 | **Dedicated and self-directed lifelong learner**<br>ان یکون دائما حریصا علی التعلم من الاساتذة، والاطباء والکتب- **(کلیات ابن رشد)**<br>شدید العنایات بجمیع کتب بقراط و جالینوس باشد آنچہ در کتب اوشان رائے خودہا دادہ اند و بحث کند از غوامض آنہا و تذاکرہ از صاحب آنہا و حریص باشد بنظر در آنہا- **(رموز اعظم)** |
| GA7 | **Ethical and environmentally responsible Professional who also respects cultural diversity**<br>طبیب اقتداکند بوصایائے بقراط **(رموز اعظم)**<br>طبیب را باید کہ شفیق،رفیق اللسان رحیم برضعیفان و فقیران سبقت کنندہ بمعالجہ ایشاں قبل معالجہ اغنیاء، فرق نکند در تابع و متبوع، وتوقع نفعو مکافات از ایشاں درعلاج ندارد، واگرممکنباشد ادویہغرباء ازمال خود دہد، پسندیدہ اخلاق، کثیر الرحمۃ بجملہ حیوانات، وکراہت کند از اذیت دادن بہ آنہا- **(ایضا)** |
| GA8 | **Research based community Practitioner**<br>ینبغی للطبیب ان یتحصل علوم الطب باکملہ ولوبغیر دلیل حتی یسہل لہ البحث والتحقیق کلما احتاج- **(المعالجات البقراطیۃ)**<br>ان صناعتہ الطب انما وجدت واستخرجت فی اول الامربالقیاس مع التجارب- وهذا الوقت ایضا انما یجید علا جیاویحسن عملها من استعمال هذین البابین-**(کتاب جالینوس فی التجربہ الطبیہ)** |

## Program Outcomes (PO)

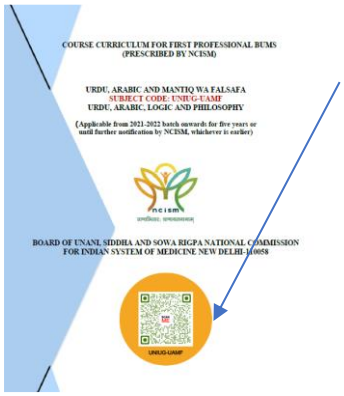
| | **Program Outcomes (PO)** |
|---|---|
| PO1 | • Appraise the basic principles of Unani medicine (*Kulliyat-e-Tibb)* which are important in maintaining *Tabiyat* and apply them to a wider variety of clinical and research contexts keeping in view of national health priorities. |
| PO2 | • Display confidence and proficiency in applying Unani fundamental principles, skills as well as recent contemporary knowledge, skills and tools) for offering *Tashkhees* (diagnosis) & *Tajweez* (prescription) for *Tahaffuzi* (preventive), *Ghizai* (dietetic), curative, health promotive, rehabilitative care through *Ilaj bit Tadbeer* (Regimenal therapy), *Ilaj Nafsani* (Psychotherapy), *Ilaj bid Dawa* (Pharmacotherapy) *and Ilaj bil Yad* (Surgery) within a quality and safety framework<br>• Recognize, respond to and learn from adverse events and medical errors. |
| PO3 | • Demonstrate ability to manage roles, responsibilities and expertise of the health professionals, able to work in teams to deliver health care services<br>• Engage in meaningful public discourse, with a profound awareness of community needs |
| PO4 | • Demonstrate competence as critical and creative thinker, with an aptitude for continued self-directed learning<br>• Display excellent interpersonal and decision-making skills<br>• Demonstrate technical and problem solving skills |
| PO5 | • Demonstrate oral and written communicative skills which may be used for patients, families, colleagues and community. |
| PO6 | • Exhibit passion for further study/learning of medical science(including the contemporary medical sciences) |
| PO7 | • Committed to excellence.<br>• Apply the principles of ethics in health care and research.<br>• Advocate improving the sustainability of the environment and be well versed with techniques & methods of proper hospital waste disposal.<br>• Dislay sensitivity and responsiveness to cultural diversity. |
| PO8 | • Apply research outcomes in updating medical practices and treatment.<br>• Compare and assess scientific evidence through critically evaluating relevant medical literature. |

GA 1 to GA 8 are matched to PO1 to PO 8.

## User manual.

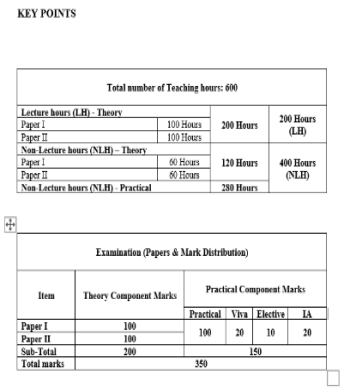
Welcome to new curriculum of NCISM for I Professional BUMS.

This is an introduction before reading the curriculum file for any course. These instructions in the manual will help reader to easily retrieve the information from the curriculum files.




First Page: Contains Name, Code, Year and "QR code" for downloading the document.

Second page is Summary page for the Course. The Page will provide at a glance information of Lecture and Non-Lecture hours, Distribution of hours as per papers, Distribution of Marks (Theory and Practical).



KEY POINTS

| Total number of Teaching hours: 600 | | | |
|---|---|---|---|
| Lecture hours (LH) - Theory | | | |
| Paper I | 100 Hours | 200 Hours | 200 Hours (LH) |
| Paper II | 100 Hours | | |
| Non-Lecture hours (NLH) – Theory | | | |
| Paper I | 60 Hours | 120 Hours | 400 Hours (NLH) |
| Paper II | 60 Hours | | |
| Non-Lecture hours (NLH) - Practical | | 280 Hours | |

| Examination (Papers & Mark Distribution) | | | | | |
|---|---|---|---|---|---|
| Item | Theory Component Marks | Practical Component Marks | | | |
| | | Practical | Viva | Elective | IA |
| Paper I | 100 | 100 | 20 | 10 | 20 |
| Paper II | 100 | | | | |
| Sub-Total | 200 | 150 | | | |
| Total marks | 350 | | | | |

Next table is Index. All the major tables are indexed.

**Curriculum:** The curriculum is defined as the guideline of the academic content covered by an education system while undergoing a particular course or program. Curriculum has a wider scope which covers the knowledge, attitude, behaviour, manners, performance & skills that are imparted or inculcated in a student. It contains every aspect from objectives to assignments. This is outcome-based approach of the curriculum.

**Graduate attributes** reflect the particular quality and feature or characteristics of an individual, including the knowledge, skills, attitudes and values that are expected to be acquired by a graduate through studies at the higher education institution.

The graduate attributes include capabilities that help strengthen learners' abilities for widening current knowledge base and skills, gaining new knowledge and skills, undertaking future studies, performing well in a chosen career and playing a constructive role as a responsible citizen in the society.

**Program learning Outcomes** deal with the general aspect of graduation for a BUMS program, and the competencies and expertise a graduate will possess after completion of the program. Name of the Programme : Bachelor of Unani Medicine and Surgery (B.U.M.S.)

As per new MSE, This programme (BUMS) is divided in three Professional years of 1.5 years each, followed by 1 year of internship. I professional BUMS has five courses (Subjects).

**Objectives**

Bachelor of Unani Medicine and Surgery programme.- The Bachelor of Unani education namely, the Bachelor of Unani Medicine and Surgery (B.U.M.S.) shall produce Graduates, having profound knowledge of Unani Medicine along with the contemporary advances in the field of Unani Medicine supplemented with knowledge of scientific and technological advances in modern sciences and technology along with extensive practical training, as an efficient physicians and surgeons for the health care services.

## Course Code and Name of Course

**First Professional B.U.M.S.**

| Sl. No. | Subject/Course code | Subject/Course | Equivalent Terms |
|---|---|---|---|
| 1. | UNIUG-UAMF | Urdu, Arabic and Mantiq wa Falsafa | Urdu, Arabic, Logic and Philosophy |
| 2. | UNIUG-KUT | Kulliyat Umoore Tabiya | Basic Principles of Unani Medicine |
| 3. | UNIUG-TB | Tashreehul Badan | Human Anatomy |
| 4. | UNIUG-MZ | Manafeul Aza | Human Physiology |
| 5. | UNIUG-TT | Tareekhe Tib | History of Medicine |
| 6. | Electives (Minimum three) Subjects | | |

**Course code**: is an abbreviation of selected alphabets given to the course (subject).

**Name of the course**: Complete name of the course is indicated in the table in each course.

Next table explains Course learning outcomes (CO) and they are matched with Programme learning outcomes.(PO)

## Table 1- Course learning Outcome and matched Program learning outcomes.

| SR1 CO No | A1 Course learning Outcome (CO) UNIUG- At the end of the course UNIUG-: the student should be able to- | B1 Matched program learning outcomes. |
|---|---|---|
| | | |

SR1: Course learning Outcome are numbered in column SR1. CO<Number> for the UNIUG-: These number will be used in the table 3 in column A3.

A1: Course Learning Outcome (CO) :

**Course Learning outcomes** (CO) is a detailed description of, what a student must be able to do at the completion of a course. CO helps the learner to understand the reason for pursuing the course. Learner can visualize the learning (it may be knowledge, Skills or attitude) at the end of the course.

Learning outcome is measurable and involves the structuring of two parts, a verb and an object. The verb phrase describes the intended cognitive process or what the learner is intended to do, and the object phrase describes the knowledge students are expected to acquire or construct.

B1: **Program learning Outcomes (POs)** matched with **Course learning outcomes (CO)**
Kamile Tib o Jarahat (BUMS) is a programme and outcomes for this are explained in earlier section. This column explains CO in column A1 matched with the appropriate PO<number> written in row in front of COs

## Table 2: Contents of the Course-

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|
| | | | | | |

Table 2 explains contents of course. List of topics and distribution according to term and marks.

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|

A2: List of topics UNIUG-: List of the topics (main and subtopics) those are included in the course.

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|

B2: Term – The course is of three terms of six months each. Topics in A2 are to be covered in three terms. This column indicates topics to be covered as per each term. Indicated by I, II, III.

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|

C2: Marks: This column indicates distribution of marks for the topic or group of topics in the course. Useful for considering the weightage of the topic in the course.
Term wise distribution is indicated in column B2 and marks distribution in C2.

| | A2 | B2 | C2 | D2 | E2 |
|---|---|---|---|---|---|

| | List of Topics UNIUG- | Term | Marks | Lecture hours | Non-Lecture hours |
|---|---|---|---|---|---|

D2 and E2 : Lecture and Non Lecture Hours:- Defines the Total number of hours allotted for the course. As per MSE, they are divided in lecture and non-lecture hours.

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|

D 2 **Lecture hours:** Lecture is an exposition of a given subject or discourse on a particular subject delivered before an audience or class. Lecture is commonest method used in the classroom for teaching. Now it is supplemented with A/V aids. Expectations from the lecture are interactive lectures. Interactive teaching method is a teaching process which is conducted through the interaction between the teacher and the learner. It is within the existing learning conditions, aiming to transfer common knowledge, skills, and values to the student.

These can be brief segments within a larger lecture-based class and can include a single or mix of several different Teaching learning and student engaging techniques. Total number of hours required to complete the topic are indicated in the column.

| | A2<br>List of Topics UNIUG- | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>Non-Lecture hours |
|---|---|---|---|---|---|

**E2 Non Lecture Hours**:- Practical-Learning means knowledge gained by implementing theory in real-life activities. This way of learning helps students to remember the topic for a long time and also to master it. Practical-learning makes the study more enjoyable, with the highest engagement in the topic.

Learning can be with various ways. Based on objectives like Disseminate knowledge, Develop capability to use ideas, to test ideas, to generate ideas, Facilitate the personal development of students, self directed learning.

Common methods like Reading, Handouts, Guest lectures, using library and other learning resources, Case studies, Work experience, Projects, Demonstrations, Group working, Simulations, Workshops, Discussion & debates, Essay writing, tutorials, Presentations, compilations, feedback on written work. Some others like Peer assessment, Research projects, Workshops on techniques of creative problem solving. Team based learning like Group working, Action learning, field work. Generating ideas with Lateral thinking, Brainstorming, Mind-mapping, Creative writing, drawing.

Others like Problem solving, Experiential learning, Role play, Mentors, Reflective logs and diaries, independent study/ self-directed learning, Work placement, Portfolio development etc.

Activities based as relevance of are expected as a part of learning experience. Time required for these activities along with different newer Teaching learning methods supported by various Audio Visual aids can be considered as **non-lecture hours**. These hours are indicated as per topic list in this column.

## Table 3: Learning objectives (Theory) of Course UNIUG-:

| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Te rm | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point >** (Lecture- <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

Table 3 Learning objectives of course UNIUG-: contents. This table contains ten columns. This comprehensive table explains Topic and subtopic wise points in the table. Matched lecture and Non-lecture hours explained as per D2 and E2 columns. It also explains learning Objective of the topic, Domain and subdomain as per Blooms Taxonomy, level, appropriate Teaching learning Method, assessment method, type of assessment and Integration for teaching.

| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Te rm | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point >** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

A3 indicates Course learning outcome (CO): - CO are explained in Column A1. Topic list is explained in column A2. This column A3 explains relation of Topic in list and course outcome denoted corresponding CO number. One topic and Objectives for topic may contribute in one or more than one CO's. They are also denoted in this column.

| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Te rm | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point >** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

B3 **Learning Objectives:** - Learning objectives are clearly written, specific statements of observable learner behaviour or action that can be measured upon completion of an educational activity. It is a description of what the learner must be able to do upon completion of an educational activity. A well-written learning objective outlines the knowledge, skills and/or attitude the learners will gain from the educational activity. One Topic covers one or many learning objectives. They are noted in Column B3. Each objective start with a verb. Before that line in the first cell "At the end of the session, the student should be able to" is common to all the statement.

| A3 Course outcome | B3 Learning Objective (At the end of the session, the student should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Te rm | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point >** (Lecture:<Number> hours, Non lecture <Number> hours) | | | | | | | | | |

C3 indicates **Domain of learning.** Benjamin Bloom has identified three domains of educational activities. The three domains are Cognitive, psychomotor and affective. Cognitive is for mental skills (Knowledge), Psychomotor is for manual or physical skills (Skills) while Affective is for growth in feelings or emotional areas (Attitude), They are also indicated by KSA (Knowledge, Skills and Attitude). All activities related to teaching and learning are aligned to these domains of learning.

Cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories. They are in ascending order. Lowest level is Knowledge (Recall), followed by Comprehension, Application. Analysis, Synthesis and Evaluation in the pyramid. They starting from the simplest to the most complex.

Psychomotor domain includes physical movement, coordination, and use of the motor skill areas. Development of these skills requires practice and is measured in terms of speed, precision, procedures, or techniques in execution. The seven major categories listed in order are Perception, Set, Guided response, Mechanism, Complex Overt Response, Adaptation and Origination.

Affective domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories listed in order are: Receiving, Responding, Valuing, Organization and Internalizing values (characterization).

These are denoted in column C3 e.g., Cognitive/Knowledge.

| A3<br>Course outcome | B3<br>Learning Objective (At the end of the session, the students should be able to) | C3<br>Domain/ subdomain | D3<br>Must to know/ desirable to know/Nice to know | E3<br>Level<br>Does/ Shows how/ Knows how/ Know | F3<br>T-L method | G3<br>Assessment | H3<br>Formative /summative | I3<br>Te rm | J3<br>Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

D3 : Considering the Course outcome, Learning objective, level of learner(UG/ PG etc), topics are classified into Must to know, Desirable to know and Nice to know. This classification is essential to focus depth of the teaching, allotted time and efforts in teaching. It reflects in Teaching learning Methods and assessment. Must know should be covered in depth, Desirable to know as an introduction and Nice to know should be a sensitization.

| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

E3 Levels of competencies in Clinical practice. It is based on Millar's Pyramid. It is divided in four levels. Lower two levels are Know and Know how based on Cognitive. Top two Shows and does for behaviour. Lower three levels are useful in UG. In any topic based on the Domain and importance, Level, Teaching and learning activities as well as Assessment methods are planned. These levels for each objective in topic are noted in Column E3.

| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/ subdomain | D3 Must to know/ desirable to know/Nice to know | E3 Level Does/ Shows how/ Knows how/ Know | F3 T-L method | G3 Assessment | H3 Formative /summative | I3 Term | J3 Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

**F3 T – L Methods:** - Teaching learning methods. Teaching learning methods are planned based on Topic need, Domain, Importance, Level to be assessed. This column indicates traditional methods like lecture as well as interactive methods.

**Lecture method:-** is an educational presentation delivered by an instructor to a group of students with the help of instructional aids and training devices. In lecture method, the teacher orally presents the course material in an organized way to the students. Lectures may contain varying level of student participation, and the students take notes. Lecturing is one of the oldest methods of teaching used by the teachers of higher education.

Lecture method gives more importance to content presentation, where the teacher is active and the students are passive, but the monotony of teaching, can be overcome by various methods of Interactivity and Audio-visual aids. It is fastest and easiest way of large group teaching. Lecture method helps to motivate, clarify doubt, review the understanding by verbal and nonverbal responses.

In lecture, various other methods can be included. A large classroom can be converted to small groups for

**Discussions: -** Leading discussions can be one of the most rewarding, and most challenging, teaching methods. Using discussions as a primary teaching method allows us to stimulate critical thinking. Large group can be converted to small groups and activity can be conducted.

Brainstorming is used as one of the teaching methods. the students participate by responding or presenting views on the topic. This technique encourages new ideas among students.

**Inquiry-Based Learning** starts from a place of questioning. Students may spontaneously ask questions or be prompted to ask questions about a particular topic. They might search to find answers, engage in activities that will help them pursue answers, or work collaboratively in pursuit of answers.

**Problem-based learning** (PBL) is a student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning.

**Case based learning: -** Same as above. A case on clinical practice or any real-life situation.

**Project-Based Learning: -** Project-based learning requires students to spend an extended period of time (e.g., a week) on a single project. Students will complete project with Learning objective and will present in class.

**Team-based learning** (TBL) is a structured form of small-group learning that emphasizes student preparation out of class and application of knowledge in class

**Flipped classroom: -** Flipped classrooms involve asking students to complete the reading, preparation and introductory work at home. Video or presentations are supplied before the class. Then, during class time, the students will ask questions and participate in discussions.

**Blended Learning:-** Blended learning is a mix method. Classroom lecture and technology together. This method relies heavily on technology, with part of the instruction taking place online and part in the classroom via a more traditional approach, similar but different than flipped classroom approach. Various online tools, apps can be added in the classroom activities.

**Edutainment:** - A combination of education and entertainment is helpful in maintaining students' interests, by using various methods of teaching such as videos, Power Point slides, demonstrations, discussions, etc.

**Early Clinical Exposure** (ECE) provides a clinical context and relevance to basic sciences learning. It also facilitates early involvement in the healthcare environment that serves as motivation and reference point for students, leading to their professional growth and development. It can be for healthy individuals or Patients. In a large classroom, it can be achieved by recorded videos, cases.

**Simulation** is also the pedagogical approach of providing students with the opportunity to practice learned skills in real-life situations. Simulation-based learning allows students to apply abstract concepts to active hands-on practice. Practicing with mock or real patients in a dedicated clinical environment such as a clinical skills lab helps students learn to make appropriate decisions at various points within the scenario.

**Role plays**: - Role play is the basis of all dramatic activity. Role playing is a way of working through a situation, a scenario, or a problem by assuming roles and practicing what to say and do in a safe setting. It is effective way of learning cognitive, affective as well as communication.

**Self-directed learning** is the process through which an individual takes responsibility for their learning. This includes assessing the needs and readiness for learning, identifying learning goals, engaging in the learning process and self-evaluation. As a part of learning students are needs to acquire many essential skills by this methods. Many online tools, E learning portals, MOOC's related to syllabus are available. As per importance of topics nice to know topics can be selected for this method.

**Problem solving method: -** Human beings face multi-dimensional problems in their lives, and they try to solve these problems in a particular way in the light of their previously gained knowledge and experiences. In this regard, it is essential for the students to be prepared for future or near future challenges by facing real life, or real like, problems in their learning environment, and finding appropriate solution of these problems. Many similar methods like Critical thinking, creative thinking can be part of this activity.

**Kinesthetic Learning** students perform hands-on physical activities rather than listening to lectures or watching demonstrations. Kinesthetic learning, values movement and creativity, is most commonly used types of instruction. Students are expected to do, make or create something. Poster making, model making, Chart making, Video Clip making. Many such activities can be part of learning.

**Workshops** on few topics for can be good Teaching method. Skills development, communication skills, ethics and many other programme outcomes can be achieved with this method.

**Game-Based Learning** Students love games, game-based learning, which requires students to be problem solvers as they work on quests to accomplish a specific goal. For students, this approach blends targeted learning objectives with the fun of earning points or badges, much like they would in a video game.

| A3<br>Course outcome | B3<br>Learning Objective (At the end of the session, the students should be able to) | C3<br>Domain/ subdomain | D3<br>Must to know/ desirable to know/Nice to know | E3<br>Level<br>Does/ Shows how/ Knows how/ Know | F3<br>T-L method | G3<br>Assessment | H3<br>Formative /summative | I3<br>Term | J3<br>Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

G3 Assessments: This column indicates method of assessment for the given Topic. Various types of assessment methods are given as per domain. For assessment of cognitive domain MCQ, extended matching items, SAQ, LAQ, Essay writing, modified essay questions (MEQs), Constructed Response Questions (CRQs), case study, open book test etc. can be conducted.

In class activities like Quiz, Puzzles, Class Presentation, Debate, Word puzzle, Online quiz and online game-based assessment methods etc. Kinesthetic activities like Making of Model, Charts, Posters, conducting interview, Interactions, Presentations, similarly Critical reading papers, Creativity Writing etc. are useful to assess current understanding and giving feedback.

Clinical or practical related video cases, simulated patients, patient management problems, checklists, Objective Structured Clinical examination (OSCE), Objective Structured Practical Examination (OSPE), Mini-Clinical Evaluation Exercise (Mini-CEX), Direct Observation of

Procedural Skills (DOPS), simulation, Clinical work sampling (CWS) can be recorded as formative assessment. Involving activities like student projects, short survey, research projects, can be used. Other Teaching Methods indicated in the column like Problem-based learning **(**PBL), Case based learning (CBL) etc. can be used as formative assessment with rating scales, checklist and pre decided scoring pattern. Record keeping like compilations, portfolios, log book, trainer's report, self-assessment, peer assessment, and 360-degree evaluation can be scored for few marks as Formative assessment.

| A3<br>Course outcome | B3<br>Learning Objective (At the end of the session, the students should be able to) | C3<br>Domain/ subdomain | D3<br>Must to know/ desirable to know/Nice to know | E3<br>Level<br>Does/ Shows how/ Knows how/ Know | F3<br>T-L method | G3<br>Assessment | H3<br>Formative /summative | I3<br>Term | J3<br>Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture: <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

H3 Formative and summative assessment: Column indicate assessment indicated in G3 should be performed as Formative and summative assessment. Few topics are indicated for formative assessment only. Most of the topics will be for formative as well as summative assessment.

I3 Term wise distribution is again indicated in column.

J3 Integration: - Students learn similar topics in more than one course(subjects). Integration of such topics, concepts, where various subject-based knowledge or aspects of one theme or topic are assimilated to provide the holistic approach. Many departments can come together to provide such holistic experience for similar topic. Horizontal and vertical integration opportunities are indicated in this column.

## Table 4: Learning objectives (Practical) of Course <course code>

| A4<br>Course outcome | B4<br>Learning Objective (At the end of the session, the students should be able to) | C4<br>Domain/ subdomain | D4<br>Must to know/ desirable to know/Nice to know | E4<br>Level<br>Does/ Shows how/ Knows how/ Know | F4<br>T-L method | G4<br>Assessment | H4<br>Formative /summative | I4<br>Te rm | J4<br>Integration |
|---|---|---|---|---|---|---|---|---|---|
| **Topic 1- <Topic point number>** (Lecture:- <Number> hours, Non lecture <Number> hours) | | | | | | | | | |

Similar to above table 3 for practical

- List of Practical is added to denote the practical.

## Table 5- Non-Lecture Activities Course UNIUG-

| Sr No | List Non-lecture Teaching-Learning methods | No of Activities |
|---|---|---|
| | | |

Table 5 summaries Non-Lecture Activities. These are indicative and as per the topic need, amongst the multiple methods denoted here and in the objectives table appropriate activities should be chosen.

## Table 6: Assessment Summary:

Assessment is subdivided in A to H points.

## 6 A-Number of Papers and Marks Distribution for First Professional BUMS

| Sl. No. | Subject/ course | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Practical or clinical | Viva | Electives | IA | Total | |
| 1. | Urdu, Arabic and Mantiq wa Falsafa (Urdu, Arabic, Logic and Philosophy) Paper I – Urdu and Arabic Paper II –Mantiq wa Falsafa | 2 | 200 | - | 30 | - | 20 | 50 | 250 |
| 2. | Kulliyat Umoore Tabiya (Basic Principles of Unani Medicine) | 1 | 100 | 100 | 20 | 10 (Set-FA)* | 20 | 150 | 250 |
| 3. | Tashreehul Badan (Anatomy) Paper I and Paper II | 2 | 200 | 100 | 20 | 10 (Set-FB)* | 20 | 150 | 350 |
| 4. | Manafeul Aza (Physiology) Paper I and Paper II | 2 | 200 | 100 | 20 | 10 (Set-FC)* | 20 | 150 | 350 |
| 5. | Tareekhe Tib (History of medicine) | 1 | 100 | - | 30 | - | 20 | 50 | 150 |
| | | | | | | | | **Grand Total** | **1350** |

[***Set:-FA, FB, FC – Sets of Electives for First Professional B.U.M.S**]

## 6 B - Scheme of Assessment (Formative and Summative)

| Sl.No. | Professional session | Duration of Professional Session | | |
|---|---|---|---|---|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First Professional B.U.M.S | 3 PA and First TT | 3 PA and Second TT | 3 PA and UE |
| 2 | Second Professional B.U.M.S | 3 PA and First TT | 3 PA and Second TT | 3 PA and UE |
| 3 | Third (Final) Professional B.U.M.S | 3 PA and First TT | 3 PA and Second TT | 3 PA and UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examination

PA: Periodical Assessment; TT: Term Test; UE: University Examinations Theory i.e. Written by the MCQ, SAQ, LAQ as per MSE and Practical Examination by Practical / Clinical/ Viva.

**Formative assessment** as, it is assessment for learning, various other methods can be used. Considering cognitive, psychomotor and affective domain appropriate method as per column G3, appropriate method should be adopted.

(Refer above explanation of Formative assessment in G3 column)

Formative assessment should be frequent activity after teaching.

Records should be kept and cumulative marks should be forwarded to university as per table

Formative assessment is defined by two terms, Periodic Assessment and term test.

Periodic Assessment and Term Test - In table 6 C method for calculation of internal assessment marks is explained. Various periodic assessment methods are explained in the table 6 D.

## 6 C Calculation method of 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 | D |
| Final IA | Average of Three Term Assessment Marks as Shown in 'G' Column | | | | | | |

## 6 D - Evaluation Methods for Periodical Assessment

| Sl. No. | Evaluation Method |
|---|---|
| 1. | Practical / Clinical Performance |
| 2. | Viva Voce / Multiple Choice Question (MCQ) / Modified Essay Question (MEQ)/Structured Questions |
| 3. | Open Book Test (Problem Based) |
| 4. | Summary Writing (Research papers) |
| 5. | Class Presentations |
| 6. | Work Book Maintenance |
| 7. | Problem Based Assignment |
| 8. | Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OSPE), Mini Clinical Evaluation exercise (Mini-CEX), Direct Observation Procedures (DOP), Case Based Discussion(CBD) |
| 9. | Extra-curricular activities (Social Work, Public Awareness, Surveillance Activities, Sports or other activities which may be decided by the department). |
| 10. | Small Project |
| 11. | Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3. |

A detailed list of periodic assessment is given in this table. Choose one activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3 or any other as per objectives from this table.
Conduct periodic test for 20 marks.

**Term Test - Conduct Theory (100 Marks) [MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)] and Practical(as per course)/(100 Marks) and convert all to 20.**

## 6 E Question Paper Pattern

**I PROFESSIONAL BUMS EXAMINATIONS**
UNIUG-
**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 |

Similar for Paper II (If applicable).

## 6 F Distribution of theory examination

| | A<br>List of Topics | B<br>Term | C<br>Marks | D<br>Type of Questions<br>"Yes" can be asked.<br>"No" should not be asked. | | |
|---|---|---|---|---|---|---|
| | | | | MCQ<br>(1 Mark) | SAQ<br>(5 Marks) | LAQ<br>(10 Marks) |
| | | | | | | |

Question paper Blue print is indicated as per Term, maximum marks allotted to topic and type of Questions.

A indicate List and name of topic and subtopic

B indicate Term

C indicate maximum marks allotted for topic or group of Topics.

D Distribution of type of question MCQ, SAQ, LAQ to be asked. "Yes" indicate can be asked. "No" indicate should not be asked.

## 6 G Blue print of paper I & II

| A<br>Question Sr. No | B<br>Type of Question | C<br>Question Paper Format |
|---|---|---|
| Q1 | Multiple choice Questions (MCQ)<br><br>20 Questions<br><br>1 mark each<br><br>All compulsory | 1. Topic number<br>2. Topic number<br>3. Topic number<br>4. Topic number<br>5. Topic number<br>6. Topic number<br>7. Topic number<br>8. Topic number<br>9. Topic number<br>10. Topic number<br>11. Topic number<br>12. Topic number<br>13. Topic number<br>14. Topic number<br>15. Topic number<br>16. Topic number<br>17. Topic number<br>18. Topic number<br>19. Topic number<br>20. Topic number |
| Q2 | Short answer Questions (SAQ)<br>Eight Questions | 1. Topic number / Topic number<br>2. Topic number / Topic number<br>3. Topic number / Topic number |

| | | |
|---|---|---|
| | 5 Marks Each<br>All compulsory | 4. Topic number / Topic number<br>5. Topic number / Topic number<br>6. Topic number / Topic number<br>7. Topic number / Topic number |
| Q3 | Long answer Questions (LAQ)<br>Four Questions<br>10 marks each<br>All compulsory | 1. Topic number / Topic number<br>2. Topic number / Topic number<br>3. Topic number / Topic number<br>4. Topic number / Topic number |

6 G - Blue printing of paper: - Based on 6 F should be used for framing question paper.

A indicates Sr. No question

B indicates Type of Questions.

C indicates Topic number from which question is to be framed.

All questions should be compulsory.

For Q 1 MCQ 20 questions to be framed based on the topics indicated in column C. Must to know part 15 MCQ, Desirable to know 3 MCQ, Nice to know 2 MCQs.

For Q 2 SAQ 8 questions to be framed based on the topics indicated in column C. 7 Questions from Must to know 1 Question on Desirable to know and no Questions on Nice to know

For LAQ 4 questions to be framed based on the topics indicated in column C All questions on must know. No Questions on Nice to know and Desirable to know.

Structured Questions should be asked for LAQ and a clear demarcation of marks also should be given.

A balance of question assessing Knowledge, Comprehension, Application and Analysis should be maintained.

## 6 H Distribution of Practical Exam

| S.No. | Heads | Marks |
|---|---|---|
| 1 | Practical (Total Marks 100) | |
| | Heading 1 | |
| | Heading 2 | |
| | Heading 3 | |
| | Heading 4 | |
| | | |
| **2** | Viva Voce | |
| **3** | Internal | |
| **4** | Electives (if applicable)) | |
| | Total Marks | |

6 H indicates Marks Distribution as per various heads. Practical, Viva. Internal assessment marks(IA) and Electives (If Applicable).

**7. References books/ Resources**

Books and Resources for the course/ subject are provided in this point..

## Implementation

- Select a topic as per term
- Read the objectives
- Think of Domain
- Decide lecture plan and prepare material A/V aids(PPT, Charts etc)
- Decide non lecture activities to be conducted. Prepare resources (Case, problem etc)
- Decide assessment method (formative) and prepare material if required (e.g. Quiz, puzzle, etc)
- Make lesson plan. (Template next page)
- Conduct session/practical

LESSON PLAN TEMPLATE

| | | | |
|---|---|---|---|
| Name of College: | | | |
| Name of Department (s) | | | |
| Name of Course Academic Year Batch – | | | |
| Learning Objectives: | | | |
| Instructional Method (Circle as appropriate) -<br><br>Lecture /Seminar /Tutorial / Bedside Clinic / OPD Session / Community Visit / Hospital visit, any other | | | |
| Duration - LH- NLH | | | |
| Time | Activity Description | Resources/ A-V Aids | Assessment Method / s |

List of Learning Resources : (Textbook, e – resources, other)
Referenced according to Vancouver style

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| **Dr. Gaurav Sawarkar** | Associate Professor, Mahatma Gandhi Ayurved College Hospital & Research Centre, Wardha, Maharashtra |
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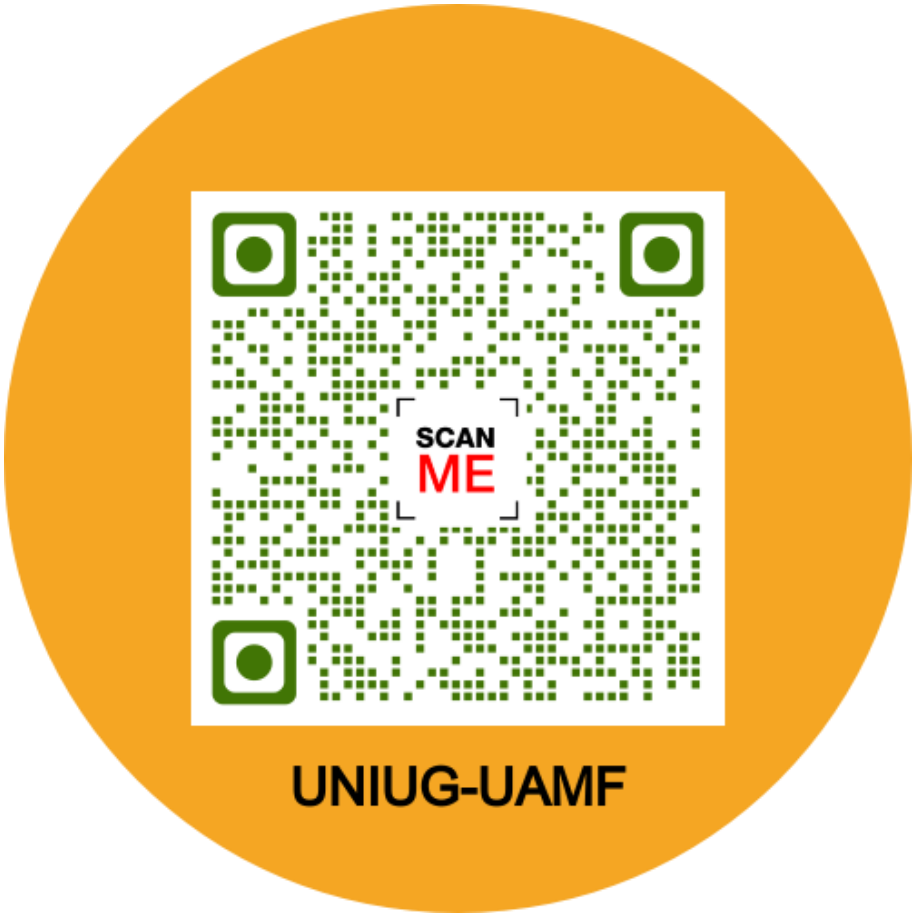


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**Kulliyat Umoore Tabiya**

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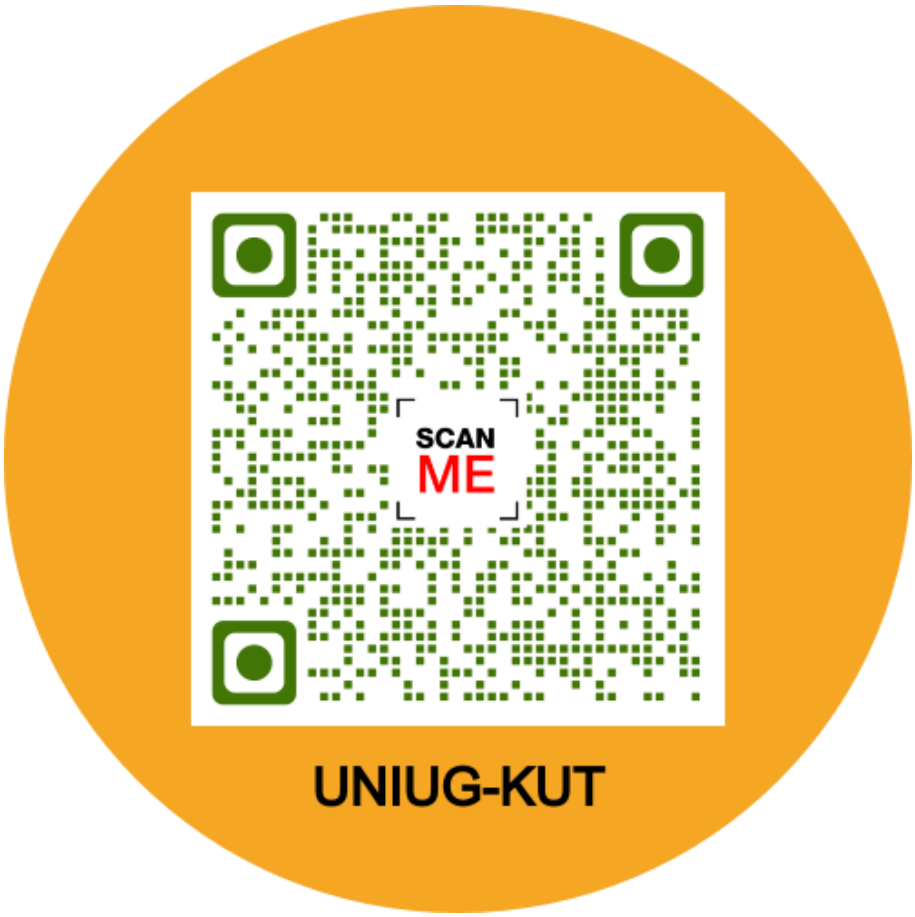


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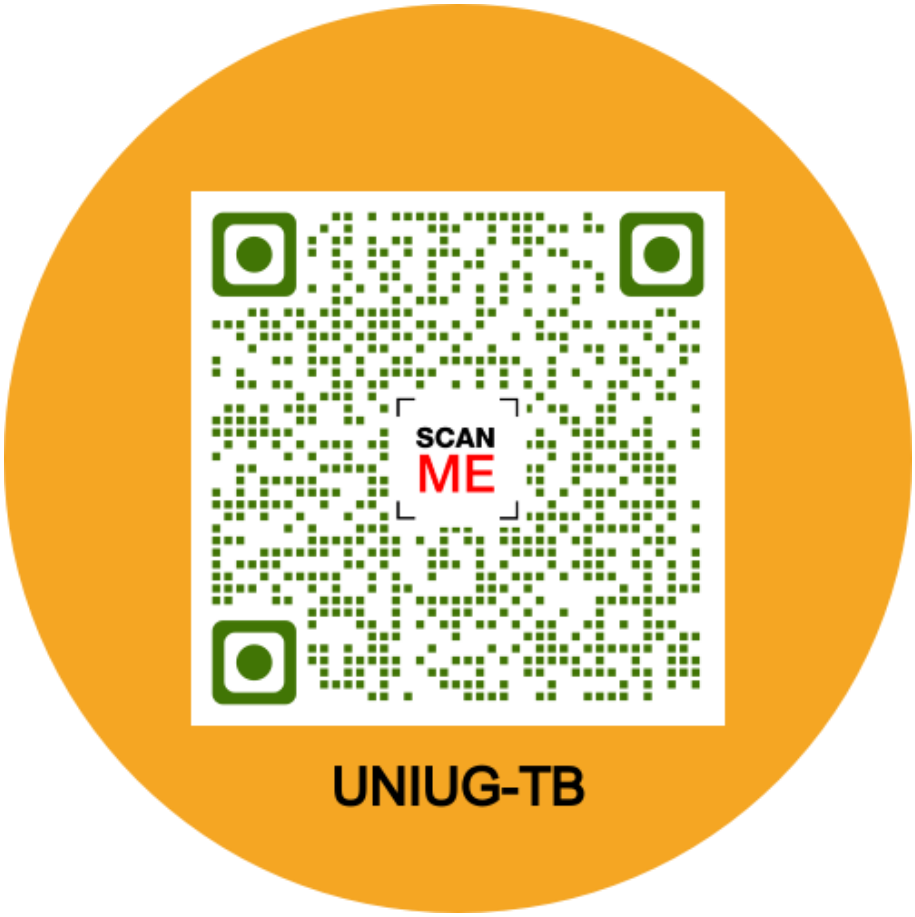
**Tashreehul Badan**

## (Anatomy)

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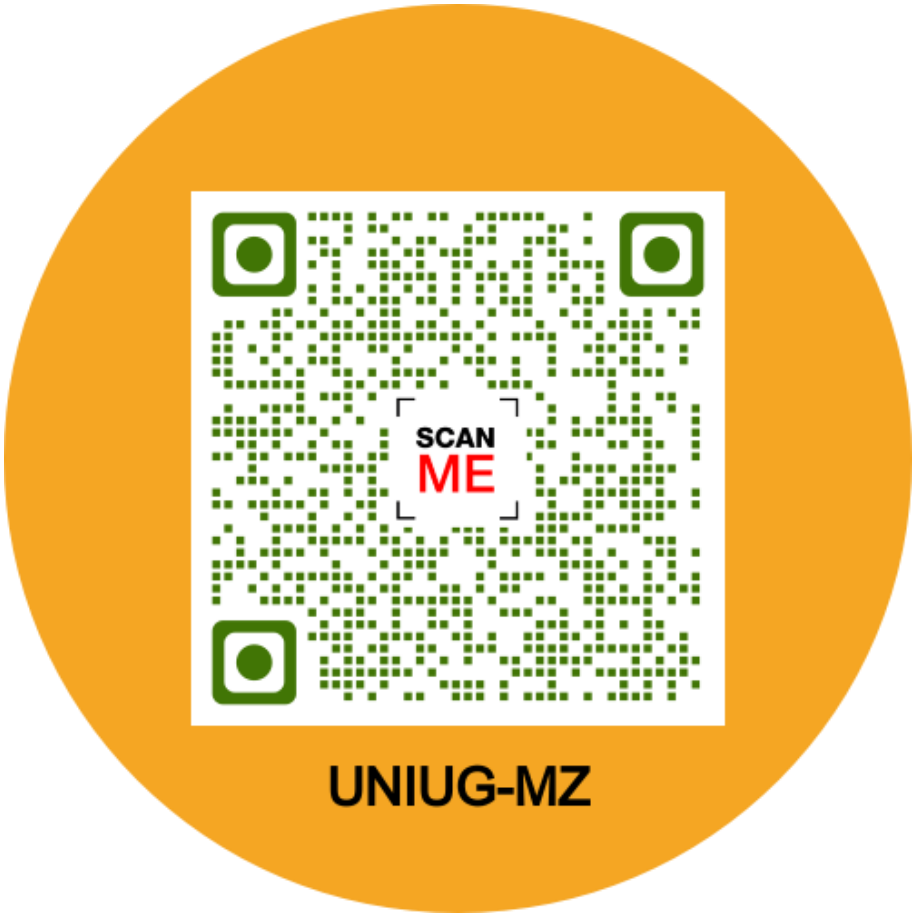
## Manafeul -Aza

## (Physiology)

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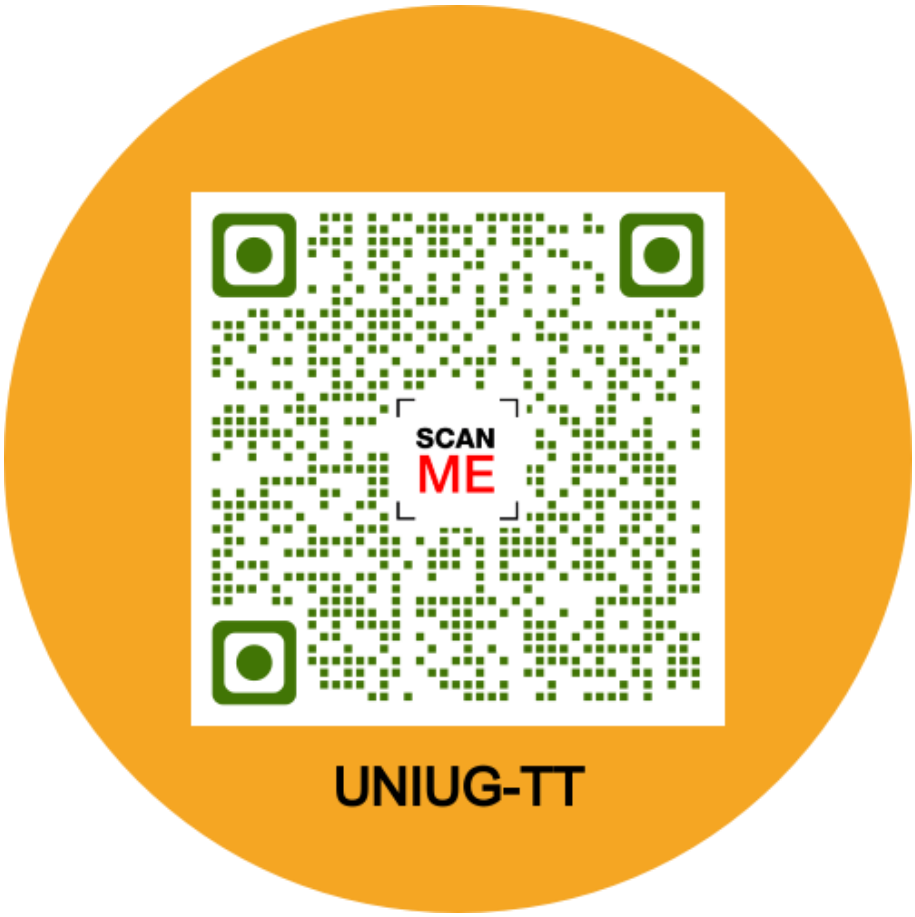
## (History of medicine)

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