

**REVISED BY-LAWS, REGULATIONS AND CURRICULUM OF  
THE BACHELOR OF UNANI MEDICINE AND SURGERY  
(BUMS) DEGREE PROGRAMME**



**2025**

**FACULTY OF INDIGENOUS MEDICINE  
UNIVERSITY OF COLOMBO**

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UNANI MEDICINE AND SURGERY (BUMS) DEGREE PROGRAMME**

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## **By-Laws of the Bachelor of Unani Medicine and Surgery (BUMS) Degree Programme**

By-Laws made by the Council of the University of Colombo under section 135 of the Universities Act No.16 of 1978 as amended and read with the Faculty of Indigenous Medicine Ordinance No. 7 of 1979.

### **By-Laws**

1. These By-Laws may be cited as the Degree of Bachelor of Unani Medicine and Surgery By-Laws No27/2019.
2. These By- Laws shall be deemed to have come into operation with effect from 10.07.2019 as determined by the Council of University of Colombo.
3. These revised By- Laws shall be deemed to have come into operation with effect from 12.03.2025 as determined by the Council of University of Colombo.

### **Part I - General**

4. Subject to these By-Laws, a student may be awarded the Degree of Bachelor of Unani Medicine and Surgery of the University of Colombo (hereafter referred to as the “University”), if such student<sup>1</sup>
  - a) been admitted to the Faculty of Indigenous Medicine (hereinafter sometime referred to as the “Faculty”) of the University as a student under section 15 (v) of the Universities Act No. 16 of 1978 as amended;
  - b) been a duly registered student of the University for the period prescribed by these By-Laws;
  - c) there after pursued the programme of study in the Faculty to the satisfaction of the Faculty board as prescribed by these By-Laws and other By-Laws, Regulations and Rules of the University and the Faculty;
  - d) satisfied the examiners at the prescribed written examinations, viva voce examinations, practical or clinical cum viva voce examinations, continuous assessments, and research project approved by the Faculty and the University;
  - e) paid such fees as may have been prescribed by the University and any other dues as may be payable to the Faculty and/or the University; and,
  - f) fulfilled all other requirements prescribed by these By-Laws and other By-Laws, Regulations and Rules of the Faculty.

#### **4. Admission Requirements**

- a) No person shall be eligible to be admitted to the Programme of Study leading to the Degree of Bachelor of Unani Medicine and Surgery (hereinafter sometime referred to as the “Degree Programme” or “Programme”) unless has passed the G. C. E. (Advanced Level) in Bio-Science Stream and satisfied the criteria recommended by the University Grants Commission for the admission to undertake the Programme in the Faculty.
- b) An applicant who wishes to join the Degree Programme shall be a fit and proper person who is able to undertake the Programme and shall not suffer from any mental and/or physical disability that may hamper the effective undertaking of the Programme and/or

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<sup>1</sup>Please note that the use of female pronoun here and elsewhere in these By-Laws refers to both male and female genders.

hinder the effective performance of duties and/or discharge the obligations of the medical practice and profession. Applicants shall be required to prove themselves as physically and mentally fit by a medical examination. The medical examination will be conducted by the University.

- c) Applications of a limited number of foreign students may be accepted for the Degree Programme subject to the guidelines of the University Grants Commission and/or the availability of places.
5. (1) Subject to these By-laws, the period of study of the Degree Programme shall be five academic years of study.
- (2) The maximum period of study within which a student shall complete the Degree Programme is ten academic years from the date of first registration for the Programme, unless the Senate has, on the recommendation of the Faculty, granted permission to extend the registration for valid reasons.
- (3) Selected students shall register initially for the Programme by completing the registration procedure as instructed by the Faculty, including paying the relevant fees to the Faculty. The initial registration shall be deemed to be the registration for the First Year of the Degree Programme and be valid for the two semesters of that academic year.
- (4) Subject to these By-Laws and other By-Laws, Regulations and Rules of the University and the Faculty Board of the Faculty (hereinafter referred to as the “Board”), the registration for a year of the Programme shall be valid for two semesters and the registration shall lapse at the end of the period of its validity.
- (5) It shall be the responsibility of a student to keep her registration valid by renewing it at the end of the period of its validity, provided she is eligible to renew the registration.
- (6) The medium of instruction and examination of the Degree Programme shall be English and wherever necessary, Tamil/Sinhala may be used.
6. Administration of the Programme
- (1) Subject to the general and/or special directions of the University, the Faculty shall be in charge of the administration and general direction of the Degree Programme.
- (2) The Dean of the Faculty shall function, ex officio, as the Head of the Programme. She may enlist the assistance of any member of the academic and/or administrative staff towards the administration of the Degree Programme.
- (3) The Dean may refer, where she thinks it desirable, any issue or question relating to the administration of the Degree Programme to the Board and/or the Senate for its/their guidance and/or recommendation and/or direction.

## **Part II – Academic Programme**

7. (1) The program of study leading to BUMS degree shall be a full-time 5-year program based on the Annual system as First Year BUMS, Second Year BUMS, Third Year BUMS, Fourth Year BUMS and Fifth Year BUMS. Academic activities in each year will be conducted with 2 semesters per year. The study duration of a Semester shall be fifteen weeks, and the study duration of an academic year shall be thirty weeks unless otherwise decided by the Senate on the recommendation of the Board.
- (2) The Senate, on the recommendation of the Board, shall prescribe by Regulations the curriculum of the Degree Programme, the names and number of subjects, their syllabi, the

number of papers of each subject, maximum marks carried by each subject, methods of assessment of the subjects, criteria of computation of results, etc. of the Programme.

- (3) The Senate shall have the power, on the recommendation of Faculty Board, to change, amend, add to or delete from the names and number of Subjects, their syllabi, the number of papers, maximum marks carried by each subject, methods of assessment of the subjects and criteria of computation of results, etc. of the Programme. The Faculty shall cause due notice is given to the students of any such amendments, changes, additions or deletions of the curriculum.
- (4) The Faculty shall conduct lectures, practical, clinical classes, tutorials, field visits, research, guided reading and other relevant academic and learning activities of the Degree Programme on a Semester basis.

## 8. Course notation

e.g. U118

U	Study programme
1	Academic year
1	Serial number of the subject
8	Number of credits for the subject

9. The First Year BUMS Course of study shall consist of the following subjects as more fully described in the Regulations approved by the Senate:

U115 Mantiq wa Falsafa (Logic and Philosophy)

U125 Tareekh e Tibb wa Akhlaqiyya (History of Unani Medicine and Behavioral Sciences)

U134 Urdu wa Arabic I

U147 Kulliyat Umoore Tabi'iyya wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) I

U156 Tashreehul Badan (Anatomy) I

U166 Munafeul Aaza (Physiology and Biochemistry) I

U176 Ilmul Advia (Unani Pharmacology) I

10. The Second Year BUMS shall consist of the following subjects as specified by Regulations approved by the Senate:

U214 Urdu wa Arabic II

U227 Kulliyat Umoore Tabi'iyya wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) II

U235 Tashreehul Badan (Anatomy) II

U245 Munafeul Aaza (Physiology and Biochemistry) II

U257 Ilmul Advia (Unani Pharmacology) II

U267 Dawa Sazi (Unani Pharmaceuticals)

U276 Ilmut Taklees (Calcinology)

11. The Third Year BUMS shall consist of the following subjects as specified by Regulations approved by the Senate:

U317 Tahaffuzi wa Samaji Tibb (Unani Preventive and Social Medicine)

U324 Ilmus Sumoom (Unani Toxicology)



U336 Usool e Ilaj wa Ilaj Bit Tadbeer (Unani Fundamentals of Therapeutics and Regimenal Therapy)  
 U346 Usool e Tashkhees, Sareeriyat wa Ilmul Amraz (Unani Principles of Diagnosis, Bed Side Clinic and Pathology)  
 U355 Mahiyatul Amraz (Pathology)  
 U363 Research Methodology and Medical Statistics

12. The Fourth Year BUMS shall consist of the following subjects as specified by Regulations approved by the Senate:  
 U418 Moalejat (Unani Medicine) I  
 U426 Moalejat (General Medicine) II  
 U435 Deshiya Chikitsa (Indigenous Medicine) I  
 U447 Amraz e Ain, Uzn, Anf, Halqwa Asnan (Unani Ophthalmology and Diseases of Ear, Nose, Throat and Dentistry)  
 U457 Amraz e Atfal (Unani Paediatrics)  
 U463 Tibbe Qanoon (Forensic Medicine)  
 U476 Research Project
13. The Fifth Year BUMS shall consist of the following subjects as specified by Regulations approved by the Senate:  
 U518 Moalejat (Unani Medicine) III  
 U525 Ilmul Jarahat (Unani Surgery)  
 U536 Amraz e Niswan, Qabalat wa Naumaulood (Unani Gynecology, Obstetrics and Neonatology)  
 U548 Deshiya Chikitsa (Indigenous Medicine) II

### **Part III – Assessment and Examination**

14. (1) The examinations leading to the Degree of BUMS shall take the forms of Formative Assessment - Continuous Assessments (CAs) – and Summative Assessment –Five Annual Examinations.  
 (2) The examinations leading to the Degree shall be -  
 a. First Year BUMS Examination  
 b. Second Year BUMS Examination  
 c. Third Year BUMS Examination  
 d. Fourth Year BUMS Examination  
 e. Fifth Year BUMS Examination.  
 (3) Each above annual examination shall have a repeat examination before proceeding to the next year.
15. The award of the Degree shall be based on the successful completion of the above examinations as laid down in the Regulations.
16. Each of the Examinations prescribed by these By-Laws and the Regulations thereunder shall be conducted by a Board of Examiners constituted by the Board and approved by the Senate for the conduct of that Examination.

17. A student shall not be permitted to sit for an Examination unless the Heads of the Departments of Unani (hereinafter sometime referred to as the “Heads”) has certified that such student has satisfactorily completed the prescribed subject/s for that Examination, fulfilled the attendance requirements and any other requirements as may be specified by these By-Laws.
18. A student must have a minimum 75% of attendance at lectures and practical or clinical classes in each subject to be eligible to sit for the corresponding examination. A student with attendance ranging between 65% - 74% may be permitted to be eligible to sit for the examination only in exceptional circumstances due to medical and/or valid and acceptable grounds. A student with attendance ranging between 65% - 74% without valid and acceptable grounds and a student with attendance less than 65% shall sit for the examination in the next scheduled examination as a re-sit candidate.
19. A candidate shall take each Examination leading to the Degree on the very first occasion on which the Examination is held after the completion of the course of study for that Examination, unless the Senate, based on a valid and acceptable reason, permits, on the recommendation of the Board, the candidate to take the Examination on the next occasion on which the examination is held.
20. Where a candidate does not take an Examination on the very first occasion on which the Examination is held after the completion of the course of study for that Examination, the candidate shall be deemed, unless the Senate determines otherwise, to be deemed to have taken the Examination on the first occasion, which shall be taken into account when computing the total number of attempts on which an Examination may be taken by a candidate. Any subsequent attempt at the Examination must be taken at the very next available Examination, subject to the provision in respect of a valid excuse accepted by the Senate. These valid reasons are applicable for a subject but not a component of a subject at the examinations.
21. (1) The reasons for granting valid excuse by the senate may include -
  - a. illness of the candidate
  - b. personal problem involving an immediate family member of the candidate
  - c. candidate’s participation in a University or national level activity for which prior permission has been obtained from the Senate, or
  - d. any other cause such as a natural disaster clearly precluding a candidate from sitting the Examination.(2) In all these instances the candidate must follow accepted University procedures (e.g. submission of medical certificate, other documentary evidence, etc.) and the Senate may request further documents for authentication.  
(3) The Senate reserves the right to grant or deny a request for excuse at an Examination.
22. In the event that a candidate is unable to appear for a viva voce, clinical/practical cum viva voce component of an ongoing examination due to a reason acceptable as a valid excuse by the Senate (e.g. a candidate being admitted to hospital), upon request by the candidate, the relevant Heads and the Dean may consider re-scheduling that component enabling the candidate to take that component of the examination. This privilege is entirely at the discretion of the relevant Heads and the Dean. However, this privilege shall not be applied to written examinations.

23. (1) A candidate who does not successfully pass an Examination after the completion of the course of study for that Examination shall re-take the entire Examination or those subjects as informed by the Faculty, at the very next occasion on which the relevant Examination is held.  
(2) Where the candidate does not take that Examination or subject/s, as the case may be, at that occasion the candidate shall be deemed, unless the Senate determines otherwise, to have taken the Examination or the subject/s at that occasion, which shall be taken into account when computing the total number of attempts on which an Examination and/or subject/s may be taken by a candidate.
24. (1) Students shall have to apply on prescribed form, through the relevant Head/Heads, to register for each Year BUMS Examination of the Degree Programme that they become eligible to take, when application for registration of the Year BUMS Examinations is called for by the Faculty.  
(2) The Faculty shall have authority not to register an applicant for an Examination or subject/s when she has not satisfactorily completed the requirements to be eligible to appear for that Examination and/or for any other valid reason notwithstanding that a candidate may have completed all the academic requirements to be eligible to appear for an Examination.
25. Appearing at an Examination denotes taking all the required components of the subjects of the Examination needed for completion of the Examination. Candidates shall take all the required components of the subjects of the Examination at one and the same sitting except where the Faculty permits a student to re-take some of the subjects of the Examination when she is, or is deemed to be, a repeat candidate.
26. There shall be a Continuous Assessment (CA) for each subject in each semester during each year BUMS Course of study which shall contribute towards the final marks of the subjects in each year BUMS Examination.
27. When a candidate appears for an examination in the subsequent attempt the marks obtained for subject/s in the Continuous Assessment will not be added to the final marks for the subject/s when computing.
28. (1) All regulations relating to examination procedure, offences and punishment contained in the Examination Procedure, Offences and Punishment Regulation No.1 of 1986 shall *mutatis mutandis*, apply to and in relation to all assessments/examinations of the Degree Programme.  
(2) Without prejudice to the generality of the Regulation 2023, rules relating to different components of the Formative Assessment may be formulated and implemented by the relevant Head/s and any matters relating to such components may be decided by the Board on the recommendation of the Dean and the Head.  
(3) Rules relating to viva voce assessments, assignments, practical or clinical cum viva voce assessment, research project etc. may be announced, from time to time, by the Head/s in consultation with the relevant teachers and such rules shall not be changed or revoked unless otherwise decided by the Board. Provided there shall at least three examiners be present and mark the performance of candidates when conducting viva voce assessment or any oral assessment (with or without written component).

29. (1) The English and Information Technology (IT) is a zero-credit subject for the Degree Programme. The English and IT will be offered as an intensive course after the registration of the student's intake before the commencement of First Year. The candidates should appear English and IT Examination at the end of the intensive course. The successful completion of English and IT will be considered in awarding Degree, though the result obtained will not be taken into account for the computation of GPA.  
 (2) Examination in English and Information Technology has (1) a theory component (English), and (2) a practical examination (IT)
  1. The theory component: There is one question paper consists of
    - i. MCQ – 20 questions (30 minutes) – 20 marks ( $1 \times 20$ )
    - ii. SEQ – 5 questions (90 minutes) – 40 marks ( $8 \times 5$ )
    - iii. Essay – 2 questions (60 minutes) – 40 marks ( $20 \times 2$ )
  2. The practical component of IT consists of computer based practical examination – 60 minutes  
 Total marks for the practical component is 100
- (3) The student shall score a minimum of 50% of total marks allocated to pass the English and Information Technology examination. When the candidate does not obtain the minimum pass marks, such candidates shall be deemed to have passed the English and Information Technology examination with the intensive course of the next batch.
30. A candidate appearing for all the BUMS Examinations shall take all the components of the Examination relating to each subject and obtain a minimum % mark from the allocated marks for each component. This minimum pass mark shall be
  - a. 40 % for theory component (MCQs, SEQs and EQs) of the subjects in the first, second, third, fourth years and 45 % for the subjects in the fifth year.
  - b. 40% for the practical/clinical cum *viva voce* examination of the subjects in the first, second, third, fourth years and 50 % for the subjects in the fifth year.
31. The pass mark for each subject will be 50% from the 100 marks allocated for each subject in the final calculation. Only candidates who gain pass marks in each component and gain minimum 50 % of total 100 will be able to pass that subject. In case of a candidate who obtained less marks mentioned in above (30) in any component with minimum aggregate marks 50 shall be offered grade C-.
32. The maximum grade offered for a repeat candidate for a subject shall be grade C. Accordingly, the maximum marks she gets for the subject shall be 50 (the lower limit of the marks range allocated for grade C).
33. No minimum pass marks for *Viva voce* examination and CA components.
34. A candidate following the BUMS Course may be absent from a component of the CA of any subject provided she submits within the prescribed period an approved medical certificate or any other reason accepted by the Senate. In such a case, a make-up component of the CA may be designed by the concerned Department of study to be taken by her. If a candidate does not

sit for a component of the CA without any valid excuse acceptable to the Senate to cover the absence, she shall be given a “0” mark for the particular component of the CA.

35. (1) A candidate shall be deemed to have passed the BUMS Examinations of each year if the candidate has satisfied the Board of Examiners by passing all the relevant Unani subjects as specified by these By-Laws and/or Regulations approved by the Senate.  
(2) The Second Year BUMS Examination is a Bar Examination. A candidate must pass all subjects of the First and Second Year Examinations to proceed to the Third Year BUMS. (3) The Fourth Year BUMS Examinations is a Bar Examination. A candidate must pass all subjects of the Third and Fourth Year Examinations to proceed to the Fifth Year BUMS.  
(4) A candidate may fail in one or more subjects at the BUMS Examination, when the candidate does not obtain the minimum grade C. Such candidates shall be deemed to have passed the BUMS Examination when they passed the failed subject/s at a subsequent BUMS Examination.
36. A candidate shall take the theory component, *viva voce*, practical cum *viva voce* component and clinical cum *viva voce* component of any subject at one and the same Examination. No candidate shall take the theory component of any subject in one Examination and other components in a different Examination. The candidate shall take and complete all the components of a subject in one sitting.
37. In the case of candidates who are registered for the BUMS Examination as her first attempt, but who could not sit for all or any of the subjects of this Examination (due to sickness or any other valid reason acceptable to the Senate), shall have to appear for the particular subject/s at the next occasion. This appearance will be considered as the first attempt. Those who did not submit the valid reasons or the tendered reasons are not accepted by the Senate for the absence the next appearance will be considered as a repeat attempt.
38. A candidate who does not pass all the subjects of each BUMS Examination within the four scheduled/successive attempts shall not be allowed to continue her registration in the BUMS Programme. Such a candidate shall cease to be a registered student of the BUMS Programme and her registration with the Faculty and the University shall be deemed to have been terminated.
39. A candidate who does not register for a scheduled examination without a valid reason acceptable to the Board/Senate shall be considered to have exhausted that attempt, and that attempt shall be counted towards the four attempts cited in section 38 above.
40. Research Project shall commence at the beginning of the first Semester of the Fourth Year BUMS and shall extend up to the end of second Semester of the Fourth Year BUMS. A candidate shall obtain minimum C grade for the completion of the research project successfully.
41. A candidate who obtains less than C grade in all four subjects or E grade in any two of the 4 subjects of the Fifth year BUMS examination shall be considered to have failed the entire Fifth

year BUMS examination. Such candidates shall be deemed to have passed the examination when they pass the four Subjects at a subsequent Fifth year BUMS examination.

42. Provided all periods of exemption granted by the Senate shall be excluded when computing the period of ten academic years. Exemptions that shall be considered for extension of this period shall be those periods where the academic work of the Faculty was interrupted or disrupted due to unforeseen circumstances, and any period of illness of the candidate which is supported by the recommendation of a Medical Board duly approved by the Senate. The period of exemption shall be added to the above period of ten academic years when computing the maximum period of registration that shall be allowed to such candidates.
43. The final GPA shall be computed from grades of all Five Years specified by the Regulations made by the Senate.

**44. Calculation of the Grade Point Average (GPA)**

Range of Marks	Grades	Grade Point Values
85-100	A+	4.00
80-84	A	4.00
75-79	A-	3.70
70-74	B+	3.30
65-69	B	3.00
60-64	B-	2.70
55-59	C+	2.30
50-54	C	2.00
40-49	C-	1.70
35-39	D+	1.30
30-34	D	1.00
0-29	E	0.00

GPA of a student is calculated by multiplying Grade Point Value he or she has earned for each Subject with its Credit Value. The total of the multiplied points of whole Subjects ( $\Sigma C_{gi}$ ) is divided by the total of Credit Values of the whole Subjects ( $\Sigma C_i$ ).

$$\text{GPA} = \Sigma C_{gi} / \Sigma C_i$$

e.g., a student who has completed a course of four subjects each 4 credits and two subjects each of 2 credits with grades of A+, C+, B, C+, A and B respectively would have the GPA.

$$\text{GPA} = \frac{4 \times 4.0 + 4 \times 2.3 + 4 \times 3.0 + 4 \times 2.3 + 2 \times 4.0 + 2 \times 3.0}{4 + 4 + 4 + 4 + 2 + 2}$$

$$= \frac{16 + 9.2 + 12 + 9.2 + 8 + 6}{20}$$

$$\text{GPA} = 3.02$$

#### 45. Formula used to calculate the final marks

(1) Formula used to calculate the final marks of the subject which are having only Theory component;

i. First attempt

$(\text{Theory Examination [100]} / 100 \times 80) + \text{CA [20]}$

ii. Repeat attempt

$(\text{Theory Examination [100]} / 100 \times 100)$

(2) Formula used to calculate the final marks of the subject which are having Theory component and Viva voce component;

i. First attempt

$(\text{Theory Examination [100]} + \text{Viva voce Examination [20]} / 120 \times 80) + \text{CA [20]}$

ii. Repeat attempt

$(\text{Theory Examination [100]} + \text{Viva voce Examination [20]} / 120 \times 100)$

(3) Formula used to calculate the final marks of the subject which are having Theory component and Practical/Clinical cum Viva voce component;

i. First attempt

$(\text{Theory Examination [100]} + \text{Practical/Clinical cum Viva voce Examination [100]} / 200 \times 80) + \text{CA [20]}$

ii. Repeat attempt

$(\text{Theory Examination [100]} + \text{Practical/Clinical cum Viva voce Examination [100]} / 200 \times 100)$

#### 46. Award of the Degree

No student shall qualify for the award of BUMS Degree unless she has:

- a. Successfully completed Annual Examinations
- b. Earned 181 credits within the stipulated period
- c. Earned a final GPA of not less than 2.00
- d. Earned pass at the intensive courses (IT and English language)
- e. Successfully completed the degree programme not exceeding ten (10) years

#### 47. Award of Classes

A student who has fulfilled all the conditions stipulated in criteria, cited in section 46 above for awarding degree and not guilty of committing any examination offences should be awarded honors if she fulfilled following additional criteria.

1. First class

1. An overall minimum Final Grade Point Average (FGPA) of 3.70
2. Complete the above requirement within 6 consecutive academic years.

2. Second Class (Upper Division)

1. An overall minimum Final Grade Point Average (FGPA) of 3.30
2. Complete the above requirement within 6 consecutive academic years.

3. Second Class (Lower Division)

1. An overall minimum Final Grade Point Average (FGPA) of 3.00
2. Complete the above requirement within 6 consecutive academic years.

4. Pass

An overall minimum Final Grade Point Average (FGPA) of 2.00

48. The final GPA shall be calculated at the successful completion of the five years of examinations.

49. The final GPA shall appear in the academic transcript of each candidate.

#### **Part IV- Special Provisions**

50. The Vice Chancellor shall have authority, on the recommendation of the Dean of the Faculty, to take such action or give such direction not inconsistent with the principles underpinning the provisions of these By-Laws, as appeared to her to be necessary or expedient for the purpose of removing any difficulties that may arise in relation to academic issues pertaining to any batches of student or individual student.

#### **Part V- Interpretation**

51. In these By-Laws unless the context otherwise requires,

“Faculty Board” means the Faculty Board of the Faculty of Indigenous Medicine of the University of Colombo constituted by the Ordinance No. 7 of 1979 as amended subsequently.

“Council” means the Council of the University of Colombo constituted by the Universities Act No.16 of 1978 and its subsequent amendments.

“Faculty” means the Faculty of Indigenous Medicine of the University of Colombo constituted by the Ordinance No. 7 of 1979 as amended subsequently.

“Senate” means the Senate of the University of Colombo constituted by the Universities Act No.16 of 1978 and its subsequent amendments.

52. Any questions regarding the interpretation of these By-Laws shall be referred to the Council, whose decision thereon shall be final.

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#### **Regulations and Curriculum**

The Faculty of Indigenous Medicine (FIM) of the University of Colombo conducts the BUMS Degree programme. It is a comprehensive, integrated professional course imparting the trainees with the knowledge, skills and attitudes that are necessary to function as an Unani Graduate Doctor. The programme is of five years of the degree programme. The programme is conducted at the Faculty of Indigenous Medicine, Rajagiriya and the clinical and other training is conducted at the National Ayurveda Teaching Hospital, Colombo 08 and other selected training centers.

The academic activities of the BUMS Degree programme are organized as five (05) Years.

1. First Year BUMS
2. Second Year BUMS
3. Third Year BUMS
4. Fourth Year BUMS
5. Fifth Year BUMS



### 1.1. The Academic Programme – First Year BUMS

U115 Mantiq wa Falsafa (Logic and Philosophy)

U125 Tareekh e Tibb wa Akhlaqiyya (History of Unani Medicine and Behavioral Sciences)

U134 Urdu wa Arabic I

U147 Kuliyat Umoore Tabi'iyya wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) I

U156 Tashreehul Badan (Anatomy) I

U166 Munafeul Aaza (Physiology and Biochemistry) I

U176 Ilmul Advia (Unani Pharmacology) I

### U115 Mantiq wa Falsafa (Logic and Philosophy)

#### Core Topics

Bioscience to Unani undergraduate, Introduction, definition and history of *Falsafa* (Philosophy), Components or branches of Philosophy, Introduction, definition, aims and objectives of *Mantiq*. Introduction of philosophy of *tibb*. *Ilm aur Idrak* (Knowledge and Perception). *Ilm* and its classification. Application of *Ilm* in health and diseases. *Tasawwur-wo-Tasdeeq* (Imagination and Judgment). *Dalaalat ki tareef-wo-taqseem* (Evidence its definition and kind). Understand of *Mafhoom* (Individuals), *Nasab e arba* (Four relations). *Bahas, Bahas-e-Tanaqus* (Contradiction), *Aqsaam e Bahas*. Understand and its application of *Hujjat ki aqsaam*, *Qiyas*, *Istiqra*, *Tamseel*, (Division of Arguments, Hypothesis/ Analogy, Induction, Allegory) (Hypothesis), *Qiyas ki gismein* (Kinds of Hypothesis). Health triangle. *Ilmunnafs* (Elementary Psychology), Introduction of Somatoform disorders. Introduction to abnormal Psychology). Introduction of Psychosomatic disorders. Moral and spiritual diseases and its roots. *Tibbi rooh*: non-physical entities in our bodies / life energies. Human energy fields and subtle bodies. Vibrational medicine. Complementary and alternative medical systems / Supportive therapies: Body mind therapies, Energy therapies, Biologically based therapies, Manipulative and body-based methods. *Kaun wa Fasaad* (Anabolism and Catabolism), *Murakkabate Tāmmah*, *Jamadāt*, *Nabatāt*, *Nafs e Nabati*, *Nafs e Hyawani* and *Nafs e Natiqa* (Complete Compounds, Minerals, Plants and Botanical reason, animal reason, human reason and faculties working under them). Philosophy: metaphysics – holism & reductionism, Spiritual and Psychological well-being, Consciousness, Introduction to counselling therapies. Spiritual practices. Mental state examination. *Ilm-e-Hay'at ki tareef, aur tib se iska ta'alluq* (Introduction of Astronomy and its relation with Medicine). Spirituality and religion for health. *Role of rooh, Tabi'at, Umoor e tabaiyya* and *Sitta zarooriyya* in Holistic medicine.

#### Teaching and Learning Methods:

Interactive lectures, small group activities, Student presentations and Assignments

**Duration:** Theory hours -75 hours

**Credits: 5**

#### Recommended reading:

1. Ahmad YA. The Islamic guideline on medicine: Darussalam, Edl; 2010.
2. Alavi S. Islam and Healing Loss and Recovery of an Indo-Muslim Medical Tradition 1600-1900: permanent black: Ranikhet, Edl; 2008.
3. Al-Jauziyah Imam Ibn Al-Qaiyim. Healing with the medicine of the prophet: Darussalam Publishers and distributors: Riyadh, Edl; 1999.

4. Department of Philosophy of Medicine and Science. Theories and Philosophies of Medicine: with particular reference to Greco – Arab Medicine, Ayurveda and Traditional Chinese Medicine. Institute of history of medicine and medical research: New Delhi, 2<sup>nd</sup> edi; 1973.
5. Ibn Sina. Al Qanoon fil Tibb. (Urdu translation by Kantoori GH). Vol.3. Part 2. New Delhi: Idarakitabus Shifa, 1993.
6. Ibn-e-Sina. Al Qanoon-fil-Tibb (English translation by department of Islamic studies Jamia Hamdard), Vol.1 & 2. New Delhi; 1993.
7. Mohommed S. The prophetic medicine science: Millat book centre: New Delhi, 1992.
8. Nafis Burhanuddin, Kuliyat-e-Nafisi, Idara Kitabus Shifa, New Delhi, 1954.
9. Rizvi AA. Muslim tradition in psychotherapy and modern trends: Institute of Islamic culture: Lahore Pakistan, 1992.
10. Zaidi I.H., Zulkifle M, Ahmad S.N. Temperamentology: A Scientific Appraisal of Human Temperament. Iqtidarul Hasan Zaidi; 1999.

## **U125 Tareekh e Tibb wa Akhlaqiyya (History of Unani Medicine and Behavioral Sciences)**

### **Core Topics**

Introduction to history of medicine, Brief prehistoric period of Unani Medicine, Brief history of Unani (Greek, Roman, Arabic, Persian and Indian), History of Greek medicine, Arabic medicine. History of Unani medicine in India. Papyrus and Manuscripts, Scholars and their medical contribution: Greek, Roman, and Arab Unani scholars. Origin and development of Unani medicine and its evidences: Medical education and licensing, Hospitals, Universities and Libraries etc. History of medicine and manuscripts in Sri Lanka. History of Unani medicine in Sri Lanka. Introduction to History of Ayurveda, Siddha, Chinese Acupuncture and Homeopathy. Evolution of disease concepts. Ayurveda act, administrative framework of Ayurveda institutions. Introduction to behavioural Sciences. Learning and Memory, Critical thinking. How to prepare a scientific presentation. Types of personality according to Unani and personality Types A, B, C, D. Make the personality more vibrant, Health compromising behaviour and Health enhancing behaviours. Time management, Stress inducing factors. Stress management, Positive thinking, Communication skills. Doctor patient relationship, Ethics and Medical ethics. Exam phobia and how not to fail the examinations. Enhancing individual character. Career and major exploration. Conflict management. Leadership.

### **Teaching and Learning Methods:**

Interactive lectures, Small group activities, Student presentations, Tutorials and Assignments

**Practical training:** Field visits and Museum Visit (02)

**Duration:** Theory hours – 75

**Credits:** 5

### **Recommended reading:**

1. Ahmad YA. The Islamic guideline on medicine: Darussalam, Edl; 2010.
2. Alavi S. Islam and Healing Loss and Recovery of an Indo-Muslim Medical Tradition 1600-1900: permanent black: Ranikhet, Edl; 2008.
3. Al-Jauziyah Imam Ibn Al-Qaiyim. Healing with the medicine of the prophet: Darussalam Publishers and distributors: Riyadh, Edl; 1999.
4. Department of Philosophy of Medicine and Science. Theories and Philosophies of Medicine: with particular reference to Greco – Arab Medicine, Ayurveda and Traditional Chinese Medicine. Institute of history of medicine and medical research: New Delhi, 2<sup>nd</sup> edi; 1973.

5. Mohommed S. The prophetic medicine science: Millat book centre: New Delhi, 1992.
6. Nafis Burhanuddin, Kuliyat-e-Nafisi, Idara Kitabus Shifa, New Delhi, 1954.
7. Abd al Latif Muhamed al Abd (Edit). Al Razi's *Akhlaq al Taeib*. Publisher - Maktabat Daral Turath, Cairo. 1977
8. Barbara Fadem. Behavioural Science in Medicine. Publisher: Lippincott Williams & Wilkins. 2012.

## **U134 Urdu wa Arabic I**

### **Core Topics**

#### **Urdu**

Introduction to Alphabets, Personal pronouns, Possessive nouns, Nouns, Verbs and Particles, Interrogative, Prepositions, Direction nouns, Vowels and preposition, Introducing Unani Medical terms, Adjectives and Substance / Common noun and Proper noun, Imperative sentences, Present Tense, Past Tense, Future Tense, introducing single words used in Unani Medicine, Organs, Mufarrad Advia, Common terms used in Unani Medicine, Asbab, Alamat, Tashkees, Nuskha, Ilaj, Common terms used in fundamentals, Moalejat, Ilmul Jarahat, Atfal wa Qabalat, Tahaffuzi wa samaji tibb, Introducing sentences and classical texts, Arkan, Mizaj, Akhlat

#### **Arabic**

Introduction to Alphabets, Kinds of words, Definiteness & Indefiniteness, Gender, Personal pronouns, Demonstrative pronouns, Al I'raab wal bina, Possessive pronoun, Adjectives, Preposition, Past tense, Subject, Object, Present tense, Introduction to sentences, Al mubdatha wal kabar, Nominal sentences, Verbal sentences, Dual, Plural, Pronoun linked with verbs, Possessive construction, Adjectival Construction, Day and Time, Al idhafa and its kinds, Ordinal and cardinal numbers, The numarals (Adad wal ma'dood), Introducing terms used in Unani Medicine, Assabab wal maral wal Arl, A story from Razi's treatment, Addabeeathu Akbarul Adhibbae, Treatment with Honey (Reading Text), At the Doctor (Reading + Listening), Diseases, Parts of the body, Al umoorul kulliyya fi Ilmit tib (Fundamentals of medicine), Arkan, Amzija, Food and Drink, Arkan, The Skeleton, Respiratory system, The Mouth, Tasreehul Asnan, Digestion, Forensic Medicine, Psychiatry, Mahiyathul uluvvi wa aksamuhu.

### **Teaching and Learning Methods:**

Interactive lectures, small group activities, role play, student presentations, reflective journals and team-based language learning activities

**Duration:** Theory hours – 120

**Credits:** 04

### **Recommended reading:**

1. Al Kitaab fil Ta'allum al- Arabiyya, with DVDs, a text book for Beginning Arabic, part one, Second Edition.
2. Brustad, K., Al-Batal, M., Al-Tonsi, A. Alif Baa: Introduction to Arabic Letters and Sounds (3rd edition), (2010).
3. Umari, F., Arabic for beginners, Madrasathu Alvaul Quraan, Kashmi.
4. Wightwick, J., Gaffar, M., Easy Arabic Grammar, McGraw Hill, North America, 2005.
5. Saiful Islam SM., Arabic Grammar for Beginners, JKN Publication, United Kingdom, 2012
6. Abdur Raheem. V., Dhuroosul Lua Alarabiyya, Islamic University, Madinah, Hijri 1418, Book 2.

7. Nadwi MRI. Tibbi Arabi Reader, Aijaz publishing house: Kucha challan; 1996.
8. Fawzan, ARI., Falul, AKM., Husain, MT., Al Arabiyya baina yadaika, Arabic for all, Riyadh; 2014.
9. Muqthar ISA. Teaching Arabic Language for the Academic purposes in the Medical faculty: International Islamic University Malaysia: Kuala lumpur, Ed1; 2006.
10. Nadwi MRI. Tibbi Arabi Reader, Aijaz publishing house: Kucha challan; 1996.
11. Ibnu Sina. Al Qanoon Fil Tibb, New Delhi: Idara e Kitabusshifa; 2000.

## **U147 Kulliyat Umoore Tabi'iyah wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) I**

### **Core Topics**

Introduction to Unani Medicine, Introduction to Kulliyat Umoore Tabi'iyah, Unani concept of *Arkan* (Elements), *Kaifiyat e Arkan*, Elemental theories, Concept of *Arkan e Arba*, Classification of Human Elements, Role of Elements in Health and Disease, Unani concept of *Mizaj* (Temperament), *Mizaj e Mu'tadil*, *Mizaj* Assessment, *Mizaj e Ghair Mu'tadil*, *Mizaj al Asnan*, Unani concept of *Akhlat* (Humourology), Concepts on humoral theory, *Aqsam e Akhlat* (Classification of Humours), Origin and metabolism of humours, *Hazimat e Arba* (Four digestions), *Rutubat e Ula*, *Rutubat e Saniya*, *Taba'i Dam* (Normal Sanguineous humour), *Ghair Taba'i dam* (abnormal Sanguineous humour), *Galba e Khoon*, *Riqqat e Knoon*, *Damavi al Mizaj individuals*, *Taba'i Balgham* (Normal Phlegmatic humour), *Ghair taba'i balgham* (abnormal Phlegmatic humour), *Taba'i Safra* (Normal Bilious humour), *Ghair Taba'i Safra* (Abnormal Bilious humour), *Galba e Safra*, *Riqqat e Safra*, Features of *Safravi Mizaj* Individuals, *Taba'i Sauda* (Normal Atrabilious humour), *Ghair taba'i sauda* (Abnormal Atrabilious humour), *Galba e Sauda*, *Riqqat e Sauda*, Features of *Saudavi Mizaj* Individuals, Unani concept of *Aza*, *Mizaj al Aza*, Classification of *Aza*, Formation of *Aza e Mufradah*, Classification and Functions of *Aza e Mufradah and Murakkabah*, Classification and Functions of *Aza-e-Raeesa*, Definition of 'Uzue Mu'ti (Donor Organ) and 'Uzue Qabil (Recipient Organ). Introduction to Al Qanoon Fit Tibb, Kitabul Hawi, Kitabul Kulliyat Fit Tibb, Al Jami Li Mufradat Al Adviya Wal Aghziya, Kitabul Tasreef/ Kitab ul Umdah fil Jarahat. Subtopics of Volume I of Al Qanoon Fit Tibb, with special reference to Kulliyat Umoore Tabiya, Subtopics of Volume II of Al Qanoon Fit Tibb, with special reference to Mufrad Adviya, Subtopics of Volume V of Al Qanoon Fit Tibb, with special reference to Murakkab Adviya.

### **Teaching and Learning Methods:**

Interactive Lectures, Small group activities, Discussions, Presentations, Tutorials

**Practical Training:** Observation and Classification/Distribution of *Arkan* based on Periodic Table, Classification and Graphical record of elements in human body, Data collection / information for *Mizaj* Analysis, Categorize the given population according to the *Mizaj* concept.

**Duration:** 120 (Theory hours - 90, Practical hours - 30)

**Credits:** 07

### **Recommended reading:**

1. Hk. Hamdani SMKH. Usool e Tibb, Qaumi council Baraye Farog Urdu Zaban, New Delhi, June 1988.
2. Ibnu Rushd. Kitab ul kulliyat. 2nd ed. New Delhi: CCRUM; 1987.
3. Ibnu Sina. Al Qanoon Fil Tibb (Arabic). Lebanon: DAR al-Kotob Al-Ilmiyah; 1999.
4. Ibnu Sina. Al Qanoon Fil Tibb (Urdu trans. by Kantoori GH). New Delhi: Idara e Kitabusshifa; 2000

5. Ibnu Sina. Al Qanoon-fil-Tibb (English translation by department of Islamic studies Jamia Hamdard), Vol.1 & 2. New Delhi; 1993.
6. Ibn Nafees. Sharah Tashreeh e Qanoon. Haiatul Misriya; 1998
7. Tabri AR. Firdausul Hikmat. (Urdu trans. by Hakeem M. A. Shah). New Delhi: Faisal Publication Deoband; 2002.
8. Zaidi IH., Zulkifle M, Ahmad S.N. Tem: A Scientific Appraisal of Human Temperament. Iqtidarul Hasan Zaidi.

## **U156 Tashreehul Badan (Anatomy) I**

### **Core Topics**

Introduction, embryology, upper limb: arm, forearm, hand, pectoral region, axilla along with applied and clinical anatomy. Thorax: thoracic wall, cavity and its contents, bronchial tree and lung, esophagus, thoracic duct, mediastinum, heart, sympathetic trunk, diaphragm along with applied and clinical anatomy. Abdomen pelvis and perineum: bones, joints, muscles, blood supply, venous and lymphatic drainage, nerve supply, peritoneum, abdominal viscera, pelvic viscera, male and female reproductive organs along with applied and clinical anatomy.

### **Teaching and Learning Methods:**

Lectures, Practical, Tutorials, Activity Based Small Group Discussions, Demonstrations, Anatomical based Case Discussions

### **Practical Training:**

Laboratory training, Demonstrations, Activity Based Learning through Video Sessions, Cadaver Dissections

**Duration:** 120 (Theory hours - 60, Practical hours - 60)

**Credits:** 06

### **Recommended reading:**

1. Chaurasia BD. Human Anatomy. 5th ed. CBS publishers and distributors -New delhi. Vol I, II & III; 2010
2. Ellis H. Clinical Anatomy (A revision and applied anatomy for clinical students). 11th ed. Oxford Blackwell Scientific Publication; 2006
3. Moore KL, Dalley AF. Clinically Oriented Anatomy. 4th ed. Lippincott Williams & wilkins –Philadelphia; 1999
4. Netter FH. Atlas of Human Anatomy. 7th ed. Elsevier; 2006
5. Singh I, Pal GP. Human Embryology. 8th ed. Macmillan –New Delhi.
6. Singh I. Textbook of Anatomy with Colour Atlas. 5th ed. Jaypee Bros. Vol I, II & III; 1996
7. Tortora GJ, Derrickson B. Principles of Anatomy and Physiology. 13th ed. John Wiley & Sons (Asia) Pvt Ltd. Vol I; 2011

## **U166 Munafeul Aaza (Physiology and Biochemistry) I**

### **Core Topics**

Homeostasis, Body fluid, Hematology, Jaundice, Blood groups, Plasma protein, Immunity. Respiratory System: Mechanism of Respiration, Respiratory adaptation and Artificial respiration. Cardiovascular System: ECG, Cardiac cycle, Heart sound, Murmurs, Heart Rate and Regulation, Arterial pulse, Systemic Arterial Blood Pressure and Regulation. Gastro Intestinal System:

Digestion, Movements of gut. Urinary System: Urine formation, Composition of urine, Micturition, Renin – Angiotensin Mechanism.

### **Teaching and Learning Methods:**

Lectures, Practical, Tutorials, Activity Based Small Group Discussions, Demonstrations, Case Discussions

### **Practical training:**

Laboratory Training, Demonstrations, Hospital visits, Group presentations, Activity Based Learning through Video Sessions

**Duration:** 120 (Theory hours - 60, Practical hours - 60)

**Credits:** 06

### **Recommended reading:**

1. Barrett KE, Barman SM, Boitano S, Brooks HL. Ganong's review of medical physiology. 24th ed. Tata McGraw Hill Education Private Limited; 2012
2. Ghai CL. Textbook of Practical Physiology. 8th ed. Jaypee Brothers Medical Publishers.
3. Hall JE. Guyton and Hall Text Book of Medical physiology. 13th ed. Elsevier

## **U176 Ilmul Advia (Unani Pharmacology) I**

### **Core Topics**

Introduction to Ilmul Advia, History of Ilmul Advia, The importance and application of Ilmul Advia in day to day life, Maakhaz e Advia (source of drugs) Definition and application of Dawa, Ghiza, Dawa e Ghiza and Ghiza e Dawa, Zulkhasa, Mizaj e Advia (Temperament of drugs, Darjat e Mizaj e Advia (Degree of temperamental qualities), Important of Mizaj in the study of drugs, Istikhraj e Mizaj (Assessment of Mizaj of a Unani compound formulation), Dawa ke Ajza e Tarkeeba (Composition of drugs), Jauhar e Fial (Active principles), Dawa ki Taba'i Khusoosiyat (Special properties of drugs), Abdal e Advia (Principles and importance of Substitutess), Asrar va Aslah e Advia (Adverse effect of the drugs and its correction), Ashkal e Advia (Forms of drugs) Masalik e Advia (Routes of administration of drugs), Miqdar e khurak (Dosage), Qiyas Va Tajruba (Ancient empirical methods of induction and experimentation for the assessment of medicinal effects of unknown drugs), Detail description of important Unani medical terminologies used in Unani system of medicine. Nau'iyat e Amal (various actions) of Unani drugs on different organs and systems of human body, Nervous system, Locomoto system, Cardio vascular system (Heart, blood and blood vessels), Digestive system (Stomach, intestine, liver), Respiratory system, Genito-urinary system (Male and female), Sensory organs (Eye, ear, nose, tongue and skin), Pharmacognosy – Important chemical constituents of medicinal plants, Conservation and Husool va tahaffuz wal umur e advia, Detail study of Dawa e Ghiza and Ghiza e Dawa found in Sri Lanka.

### **Teaching and learning methods:**

Interactive lectures, team-based learning, and other small group activities, practical classes, Student presentations, assignments and projects, small group learning activities.

### **Practical training:**

Small group activities, Group presentation,

**Field visits:** Peradeniya Herbarium visit, Gannoruwa plantation visit

**Duration:** 120 (Theory hours – 60, Practical hours – 60)

**Credits:** 06

**Recommended Readings:**

1. Abdul Latif, Tauzihat e Kuliyat e Advia, Aligarh, New Delhi, India, Ibn Sina Academy of Medieval Medicine & Sciences, 2010.
2. Ghani N. Khazainul Advia. New Delhi: IdaraKitabulShifa; 2010
3. Ibn Baitar. Al JamiulMufradat al Advia walAghzia. Vol I and II. New Delhi: CCRUM; 1999:
3. Ibn Sina. Al Qanoon Fil Tib (Urdu trans. by Kantoori GH). New Delhi: IdaraKitabulShifa; 2000
4. Kabeeruddin M. MakhzanulMufradat. New Delhi: IdaraKitabulShifa

**1.2 Examinations of the First Year BUMS****U115 Mantiq wa Falsafa (Logic and Philosophy)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	Assignment
Continuous Assessments (CA) II	Report on Philosophical Writing of Unani Scholars
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ol> <b>2. Viva voce Examination</b> <ol style="list-style-type: none"> <li>Viva voce Examination (20 marks)</li> </ol>	
Formula used to calculate the final marks of the subject; <ol style="list-style-type: none"> <li>First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Viva voce Examination [20]}) / 120 \times 80 + \text{CA [20]}</math> </li> <li>Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Viva voce Examination [20]}) / 120 \times 100</math> </li> </ol>	

**U125 Tareekh e Tibb wa Akhlaqiyya (History of Unani Medicine and Behavioral Sciences)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	Assignment
Continuous Assessments (CA) II	Group Presentation
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> </ol>	

iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)
2. Viva voce Examination
i. Viva voce Examination (20 marks)
Formula used to calculate the final marks of the subject;
i. First attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 80) + CA [20]
ii. Repeat attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 100)

### U134 Urdu wa Arabic I

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	Group Presentation
Continuous Assessments (CA) II	Reflective Language Journal
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
1. Theory Component	
i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)	
ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)	
iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)	
2. Viva voce Examination	
i. Viva voce Examination - (20 marks)	
Formula used to calculate the final marks of the subject;	
i. First attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 80) + CA [20]	
ii. Repeat attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 100)	

### U147 Kulliyat Umoore Tabi'iyah wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) I

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	Assignment
Continuous Assessments (CA) II	OSPE – 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
1. Theory Component	
i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)	
ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)	



iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2) 2. Practical cum Viva voce Examination i. OSPE – 10 stations - (60 minutes) - (80 marks) ii. Viva voce Examination - (20 marks) The total mark for the Practical cum Viva voce Examination is 100.
Formula used to calculate the final marks of the subject; i. First attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}$ ii. Repeat attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100$

### U156 Tashreehul Badan (Anatomy) I

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE - 10 stations - (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations - (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20) ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5) iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2) <b>2. Practical cum Viva voce Examination</b> i. OSPE – 10 stations - (80 marks) ii. Viva voce Examination - (20 marks) Total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; i. First attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}$ ii. Repeat attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100$	

### U166 Munafeul Aaza (Physiology and Biochemistry) I

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE - 10 stations - (60 minutes)
Continuous Assessments (CA) II	Portfolio based on practical records
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the	

marks of the Subject for the first attempt of the Examination.
<b>Summative Examination: Annual and Repeat Examinations</b>
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ol> <b>2. Practical cum Viva voce Examination</b> <ol style="list-style-type: none"> <li>OSPE – 10 stations – (60 minutes) (80 marks)</li> <li>Viva voce Examination - (20 marks)</li> </ol> <p>The total mark for the Practical cum Viva voce Examination is 100.</p>
<p>Formula used to calculate the final marks of the subject;</p> <ol style="list-style-type: none"> <li>First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ol>

#### U176 Ilmul Advia (Unani Pharmacology) I

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations - (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ol> <b>2. Practical cum Viva voce Examination</b> <ol style="list-style-type: none"> <li>OSPE – 10 stations - (80 marks)</li> <li>Viva voce Examination - (20 marks)</li> </ol> <p>The total mark for the Practical cum Viva voce Examination is 100.</p>	
<p>Formula used to calculate the final marks of the subject;</p> <ol style="list-style-type: none"> <li>First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ol>	

## **2.1. The Academic Programme – Second Year BUMS**

U214 Urdu wa Arabic II

U227 Kulliyat Umoore Tabi'iyya wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) II

U235 Tashreehul Badan (Anatomy) II

U245 Munafeul Aaza (Physiology and Biochemistry) II

U257 IlmulAdvia (Unani Pharmacology) II

U267 Dawa Sazi (Unani Pharmaceuticals)

U276 Ilmut Taklees (Calcinology)

### **U214 Urdu wa Arabic II**

#### **Core Topics**

##### **Urdu**

introducing single words used in Unani Medicine, Organs, Mufarrad Advia, Common terms used in Unani Medicine, Asbab, Alamat, Tashkees, Nuskha, Ilaj, Common terms used in fundamentals, Moalejat, Ilmul Jarahat, Atfal wa Qabalat, Tahaffuzi wa samaji tibb, Introducing sentences and classical texts, Arkan, Mizaj, Akhlat

##### **Arabic**

The numerals (Adad wal ma'dood), Introducing terms used in Unani Medicine, Assabab wal maral wal Arl, A story from Razi's treatment, Addabeeathu Akbarul Adhibbae, Treatment with Honey (Reading Text), At the Doctor (Reading + Listening), Diseases, Parts of the body, Al umoorul kulliyaa fi Ilmit tib (Fundamentals of medicine), Arkan, Amzija, Food and Drink, Arkan, The Skeleton, Respiratory system, The Mouth, Tasreehul Asnan, Digestion, Forensic Medicine, Psychiatry, Mahiyathul uluvvi wa aksamuhu.

#### **Teaching and Learning Methods:**

Interactive lectures, small group activities, role play, student presentations, reflective journals and team-based language learning activities

**Duration:** Theory hours – 120

**Credits:** 04

#### **Recommended reading:**

1. Al Kitaab fil Ta'allum al- Arabiyya, with DVDs, a text book for Beginning Arabic, part one, Second Edition.
2. Brustad, K., Al-Batal, M., Al-Tonsi, A. Alif Baa: Introduction to Arabic Letters and Sounds (3rd edition), (2010).
3. Umari, F., Arabic for beginners, Madrasathu Alvaul Quraan, Kashmi.
4. Wightwick, J., Gaffar, M., Easy Arabic Grammar, McGraw Hill, North America, 2005.
5. Saiful Islam SM., Arabic Grammer for Beginners, JKN Publication, United Kingdom, 2012
6. Abdur Raheem. V., Dhuroosul Lua Alarabiyya, Islamic University, Madinah, Hijri 1418, Book 2.
7. Nadwi MRI. Tibbi Arabi Reader, Aijaz publishing house: Kucha challan; 1996.
8. Fawzan, ARI., Falul, AKM., Husain, MT., Al Arabiyya baina yadaika, Arabic for all, Riyadh; 2014.
9. Muqthar ISA. Teaching Arabic Language for the Academic purposes in the Medical faculty: International Islamic University Malaysia: Kuala lumpur, Ed1; 2006.
10. Nadwi MRI. Tibbi Arabi Reader, Aijaz publishing house: Kucha challan; 1996.

11. Ibnu Sina. Al Qanoon Fil Tib, New Delhi: Idara e Kitabusshifa; 2000.

## **U227 Kulliyat Umoore Tabi'iyah wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) II**

### **Core Topics**

Unani concept of Quwa (Powers), Classification and functions Quwa, Definition, Classification and Functions of *Quwwat e Tabaiya* (Natural/Physical Power), *Quwwat e Haiwaniya* (Vital Faculties), *Quwwat e Nafsaniyah* (Psychic or Mental Faculty), Unani concept of Tibbi Ruh (Pneuma), Types and Functions of Tibbi Ruh, Unani concept of *Af'al* (Functions), Classification of Functions according to *Quwa* and according to number of *Quwa* participating in a function, *Af'al al Mufrada*, *Af'al al Murakkaba*, Assessment of functions of organs through Nabz (Pulse), Unani concept of *Tabi'at*, Reality of *Tabi'at*, Relationship between *Tabi'at* and *Mizaj*, *Quwa*, Functions of *Tabi'at*, *Tabi'at*, *Tabi'at* and Treatment of Diseases, Relationship between *Tabi'at* and *Asbab e sittah zarooriah*, Improvement of *Tabiyat*, Introduction to *Asbab Sitta Zarooriyya*, Role of *Asbab Sitta Zarooriyya* in maintaining health, *Hararat e ghareeziya* and *Ruthubat Ghareeziya*, *Hararat e ghareebi*, *Rutubat e Ghareebi*, Description of *Asbab* (causes). Subtopics of Volume I of Al Qanoon Fit Tibb, with special reference to Hifzan e Sehat, Volume I of Al Qanoon Fit Tibb, with special reference to Usool e Tashkhees wa Ilaj, Kitabut Tasreef/ Kitab ul Umdah fil Jarahat special reference to Surgery, Volume II of Kitabul Hawi special reference to Amraz e Ain, Volume III of Kitabul Hawi special reference to Amraz Uzn, Anf wa Asnan, Volume IX of Kitabul Hawi special reference to Amraz e Niswan, Volume I, Part IV of Al Qanoon fit Tibb, with special reference to Ilaj bit Tadbeer.

**Teaching and Learning Methods:** Interactive Lectures, Small group activities, Discussions, Presentations, Tutorials

**Practical Training:** Application of diet and life style changes according to *Mizaj* concept for the health promotion, Recognize Unani diagnostic tools: bole, *baraz* and *Nabz*, *Nabz* examination, Basic laboratory analysis of blood constituents related with *akhlat* concept, *Mizaj*. Hospital visits.

**Duration:** 120 (Theory hours - 90, Practical hours - 30)

**Credits:** 07

### **Recommended reading:**

1. Hk. Hamdani SMKH. Usool e Tibb, Qaumi council Baraye Farog Urdu Zaban, New Delhi, June 1988.
2. Ibnu Rushd. Kitab ul kulliyat. 2nd ed. New Delhi: CCRUM; 1987.
3. Ibnu Sina. Al Qanoon Fil Tib (Arabic). Lebanon: DAR al-Kotob Al-Ilmiyah; 1999.
4. Ibnu Sina. Al Qanoon Fil Tib (Urdu trans. by Kantoori GH). New Delhi: Idara e Kitabusshifa; 2000 Ibnu Sina. Al Qanoon-fil-Tibb (English translation by department of Islamic studies Jamia Hamdard), Vol.1 & 2. New Delhi; 1993.
5. Ibn Nafees. Sharah Tashreeh e Qanoon. Haiatul Misriya; 1998
6. Tabri AR. Firdausul Hikmat. (Urdu trans. by Hakeem M. A. Shah). New Delhi: Faisal Publication Deoband; 2002.
7. Zaidi IH., Zulkifile M, Ahmad S.N. Tem: A Scientific Appraisal of Human Temperament. Iqtidarul Hasan Zaidi.

## **U235 Tashreehul Badan (Anatomy) II**

### **Core Topics**

lower limb: thigh, gluteal region, leg, foot along with applied and clinical anatomy. Head, neck and brain: bones, joints, muscles, blood supply, venous, lymphatic drainage, nerve supply, face, orbit, mouth, tongue, pharynx, larynx, ear, nose, cranial cavity, cerebrum, brain stem and cerebellum, cranial nerves, along with applied and clinical anatomy.

**Teaching and Learning Methods:** Lectures, Practical, Tutorials, Activity Based Small Group Discussions, Demonstrations, Anatomical based Case Discussions

**Practical training:** Laboratory training, Demonstrations, Activity Based Learning through Video Sessions, Cadaver Dissections

**Duration:** 120 (Theory hours - 60, Practical hours - 60)

**Credits:** 06

### **Recommended reading:**

1. Chaurasia BD. Human Anatomy. 5th ed. CBS publishers and distributors -New delhi. Vol I, II & III; 2010
2. Ellis H. Clinical Anatomy (A revision and applied anatomy for clinical students). 11th ed. Oxford Blackwell Scientific Publication; 2006
3. Moore KL, Dalley AF. Clinically Oriented Anatomy. 4th ed. Lippincott Williams & Wilkins –Philadelphia; 1999
4. Netter FH. Atlas of Human Anatomy. 7th ed. Elsevier; 2006
5. Singh I, Pal GP. Human Embryology. 8th ed. Macmillan –New Delhi.
6. Singh I. Textbook of Anatomy with Colour Atlas. 5th ed. Jaypee Bros. Vol I, II & III; 1996
7. Tortora GJ, Derrickson B. Principles of Anatomy and Physiology. 13th ed. John Wiley & Sons (Asia) Pvt Ltd. Vol I; 2011

## **U245 Munafeul Aaza (Physiology and Biochemistry) II**

### **Core Topics**

Physiology - Skin: functions, Endocrine system: secretions, functions, and abnormal consequences, Reproductive system: physiology of male and female reproductive system, menstrual cycle, Nervous system: Nerve impulse, cerebral cortical areas, CSF, motor and sensory pathways, cerebellum, cranial nerves and autonomic nervous system,

Biochemistry - Cell, Carbohydrate, Protein, lipid metabolism and their clinical conditions, Enzymes, Immunoglobulins, Nucleic acid, Vitamins, Anti-Oxidants, Introduction to genetic engineering and biotechnology, Reagent preparation and analytical techniques in Biochemistry, Applied and clinical aspects of Physiology and Biochemistry.

### **Teaching and Learning Methods:**

Lectures, Practical, Tutorials, Activity Based Small Group Discussions, Demonstrations, Case Discussions

### **Practical training:**

Laboratory Training, Demonstrations, Hospital visits, Group presentations, Activity Based Learning through Video Sessions

**Duration:** 120 (Theory hours - 60, Practical hours - 60)

**Credits: 06**

**Recommended reading:**

1. Allison LA. Fundamentals of Molecular Biology. 2nd ed. Collage of William and Mary. Williamsburg. USA
2. Barrett KE, Barman SM, Boitano S, Brooks HL. Ganong's review of medical physiology. 24th ed. Tata McGraw Hill Education Private Limited; 2012
3. Champe, Pamela C, Harrey, Richard A, Denise RF. Lippincott's illustrated reviews: Biochemistry. 6th ed. Two Commerce Square-Philadelphia; 2005
4. Ghai CL. Textbook of Practical Physiology. 8th ed. Jaypee Brothers Medical Publishers.
5. Hall JE. Guyton and Hall Text Book of Medical physiology. 13th ed. Elsevier
6. Victor W, Rodwell, Bender D, Kathleen MB, Kennelly PJ, Weil PA. Harpers Illustrated
7. Biochemistry. 29th ed. The McGraw – Hill Companies; 2012

**U257 Ilmul Advia (Unani Pharmacology) II**

**Core Topics**

**Part A - Unani Pharmacology**

Introduction, Detail study of medicinal plants used in Unani medicine under :*Tibbi* name of plants, Botanical name, Natural order/Family, Synonyms - English, Tamil, Sinhalese, Arabic, Sanskrit, *Mahiyat*(Habitat and Description),*Ajza e isti'mal* (Parts used in medicine),*Mizaj* (Temperament), *Kemiya e ajza* (Chemical constituents), *Naf 'e Khas* (Actions according to Unani concept), *Muzir* (Side effect), *Muslih* (Corrective), *Badal*(Substitute), *Afal e Khawas* (Usage), *Miqdar e Khurak* (Dosage)

**Part B - Pharmacology**

Fundamental of Pharmacology, principles and actions of Modern drugs on different systems of the body, Efficacy of drugs, Therapeutic application of drugs on different diseased conditions, Modern drugs from plant origin, Nomenclature of modern drugs, Pharmacokinetics, Pharmacodynamics, Toxicity, adverse drug reaction and drug interactions, The legal aspects of drug regulation, The ethical aspects and responsibilities of therapy and experiments, Importance of vitamins and minerals.

**Teaching and Learning Methods:**

Interactive lectures, small group activities, and students' presentations.

**Practical Training:**

Practical record book, Group presentations, Field visits

**Duration:** 135 hours (Theory hours - 75, Practical hours - 60)

**Credits: 07**

**Recommended reading:**

1. Ibn Baitar. Al Jamiul Mufradat al Advia wal Aghzia. Vol I and II. New Delhi: CCRUM; 1999;
2. Ibn Sina. Al Qanoon Fil Tib (Urdu trans. by Kantoori GH).Vol. II New Delhi: IdaraeKitabusshifa; 2000.
3. Kabeeruddin M. Makhzanul Mufradat. New Delhi: Idara Kitabus Shifa; 2007
4. Najmul Ghani, Khazainul Advia, New Delhi: Idara Kitabus Shifa; YNM

## U267 Dawa Sazi (Unani Pharmaceuticals)

### Core Topics

Introduction to the subject, *Aqsaam e Dawa Sazi* (Types of Pharmacy), *Qarabardeen* (Pharmacopoeias) and their authors, Good manufacturing practices for Unani medicines Weight and measures used in Pharmacy *Qadeem* and *Jadeed* (Ancient and modern) and comparative study of them Importance of making compound preparations (*Adviaka Murakkab Karneki Zaroorat*), Dosage forms of internal and external preparations, terminology and processes of making compound preparations (*Istelahat Va Ahmal e Dawa Sazi*), Purification and detoxification of single drugs (*Dawaonka Saf Karna Va Tadbeer Karna*) General method of preparation and storage conditions of *Arq*, *Joshanda*, *Kaisanda* (Distilled medical preparation, Decoction, Infusion), Process of making different types of and storage, *Maa*, *Sat*, *Ushara*, *Sheera* and *Murawwaq* (Medicinal waters and Extracts), General method of preparation and storage conditions of *Safoof* (Medicinal powders) General method of preparation and storage conditions of *Hab* and *Qurs* (Pills and Tablets) General method of preparation and storage conditions of *Sharbat*, *Sikanjanbeen* (Syrups, Vinegar syrup) , General method of preparation and storage conditions of *Murabba*, *Gulqand* (Preserves, Sugared flowers), General method of preparation of and storage conditions confections (*Itrifal*, *Majoon*, *Jawarish*, *Khameera*, *Laboob*, *Halva*) General method of preparation and storage conditions of *Roghan*, *Marham*, *Zimad* (Medicated oils, Ointments, Poultices), Vivid knowledge about Siddha and Ayurveda preparations. Murakkabat acting on various systems of the body with their ingredients, dosage, indications and contraindications, Method of writing *Nuskha* (Prescription), Rules and regulations on the usage of drugs, Introduction to quality control methods for compound medicines, and Contemporary developments of Unani Pharmaceutical preparations. Introduction and establishment of herbal drug industry, Factors of GMP and GACP, standardization of raw materials, herbal formulation, standardization of finish products, and packaging, Exposure in large scale manufacturing industries.

**Teaching and Learning Methods:** Interactive lectures, small group activities, student presentations.

**Practical Training:** Drug preparation, Practical record book, Factory visits

**Duration:** 135 (Theory hours - 75, Practical hours – 60)

**Credits:** 07

### Recommended Readings:

1. Kabeeruddin Md., Bayaze kabir, vol. I – II, Daftarul Maseekh, Hyderabad, 1960.66,67
2. Pharmacopoeia of India, Part II Vol I & II, Ministry of Health, New Delhi, 2010
3. National formulary of unani medicine, part i, ii, iii, iv, v and vi, government of india
  - a. Ministry of health & family welfare, Dept. of AYUSH.
4. Azam Khan, Asmat Ali, Hasrat Lucknawi, Qarabadeen Azam, Aijaz publishing house, New Delhi, 1996
5. Mir Md. Husain, Qarabadeen Kabeer, Vol-1, Munshi Naval Kishore, Lucknow, 1880AD
6. Md.Akbar Arzani, Qarabadeen Qadri, Munshi Naval Kishore, Lucknow, 1880AD
7. Rehman S.Z., Fune Dawasazi, , Publication Division, Aligarh Muslim University
8. Rehman S.Z., Kitabul Murakkabat, Vol-1, Publication Division, Aligarh Muslim University, 1990
9. Rafiquddin, Minhajul saidla,, Publication Division. Aligarh Muslim University, Aligarh
10. Physico-Chemical standardization of Unani Medicine, CCRUM, CCRUM, New Delhi

## U276 Ilmut Taklees (Calcinology)

### Core Topics

Introduction of KushtaSazi, IlmulKeemiyaae, Aims of Taklees, Characters and Benefits of Kushta, Istihalat used in KushtaSazi, Dol Janther and Balu Janther, PathalJantherGurabJanther etc, Principles observed in Kushta preparation, Method of making Gil e Hikmat in the preparation of Kushta, Put, Identification of Kushta e Kham with general and specific tests and Method of increasing potency of Kushta, Basic concept of detoxification, General method of Kushta preparation, Kushta e Abrak, Kushta e Tamba, Kushta e Neela Tootya and Zangar, Kushta e Para / Seemab, Kushta e Shangraf and Kushta e Raskapoor, Compound preparation related to mineral drugs. Kushta e Sona and Saindoor, Kushta e Nuqra and Kushta e SufaidKashgaree, Kushta e Hadeed and Heerakasees, Kushta e Khabsul Hadeed and Ganghak, Kushta e Qalee and Kushta e Murdar sang, Kushta e Surb and Kushta e Jist, Kushta e HajarulYahood and Kushta e Sang e Jarahat, Kushta e SummulFa'r and Darchikna, Kushta e Hadhtal and Kushta e Manosela, Kushta e Silajit and Momiyaae, Kushta e Patkary and Kushta e Suhaga / Tankar, Kushta e Zahar moharaMa'dani and Saji, Kushta e Godandi and Sang e Surma and Basari, Kushta e Yaqoot, Kushta e Almas, Kushta e Zumrud and Kushta e Aqeeq, Kushta e Yashab and Lajward and Hajaruddam, Kushta e Naushadar, Jawakar and Shoraqalmi, Makaradwaja, Compound preparation related to metal drugs. Anbar and Sang Dan e Murgh, Misk, Jundubaidastar, Abrasham, Lak, Jonk and Mahiroobiyan, Asal and Testing methods of pure honey, Sartan and Shakkar Teeghal, Kaf e Darya and Bair Bahooti, Kharateen and Aqrab, Fad Zahar Hayawani and Mom, Panneer Maya and Doodh, Kushta e Marwareedand Sinnul Feel, Kushta e Marjan, Kushta e Qaranul Eyl and Kushta e Sang e Sarmahi, Kushta e Post e Baiz e Murgh and Anda, Kushta e Kharmohara and Choona, Kushta e Sadaf and Kushta e Sang, Namak e Lahoori, Namak e Sanbar, Namak e Siya, Sochal salt, Namak e Ta'am and Tabasheer, Gairu and Gil e Makhtoom, Gil e Armani Bor e Armani, Gil e Khurasani, Gil e Miltani....etc, Compound preparation correlated to animal drugs.

**Teaching and Learning Methods:** Interactive lectures, small group activities, student presentations.

**Practical Training:** preparation of Kushtha drugs, practical record book, factory visits, workshops.

**Duration:** 120 hours (Theory hours - 60, Practical hours - 60)

### Recommended reading:

1. Kabeeruddin H.M., Kitabul Taklees. New Delhi: Central Council of Research in Unani Medicine, Kabeeruddin H.M. ynm 6. Kabeeruddin, Makhzanul Murakkabat, Idara Kitabus Shifa; 2009
2. Mahdihassan S. Indian Alchemy. 2nd ed. Delhi: Motilal Banarsidass;1991
3. Nadkarni KM. Indian Materia Medica. VolII., India: Saurab Printers; 2009.
4. Vohora S B, Khan S Y. Animal origin drugs used in Unani medicine: Vikar Publishing;1979

## 2.2. Examinations of the Second Year BUMS

### U214 Urdu wa Arabic II

Formative Examination: Continuous Assessments (CA)	
Continuous Assessments (CA)	Mode of Examination
Continuous Assessments (CA) I	Group Presentation
Continuous Assessments (CA) II	Reflective Language Journal
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the	



marks of the Subject for the first attempt of the Examination.
<b>Summative Examination: Annual and Repeat Examinations</b>
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Viva voce Examination - (20 marks)</li> </ul>
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>iii. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Viva voce Examination [20]}) / 120 \times 80 + \text{CA [20]}</math> </li> <li>iv. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Viva voce Examination [20]}) / 120 \times 100</math> </li> </ul>

### **U227 Kulliyat Umoore Tabi'iyya wa Dheewanut Tibb (Basic Principles of Unani Medicine and Authentic Texts) II**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	Assignment
Continuous Assessments (CA) II	OSPE – 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. OSPE – 10 stations – (60 minutes) - (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> The total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>iii. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>iv. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ul>	

### **U235 Tashreehul Badan (Anatomy) II**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE -10 stations (60 minutes)

Continuous Assessments (CA) II	OSPE -10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. OSPE – 10 stations - (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> <p>The total mark for the Practical cum Viva voce Examination is 100.</p>	
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>ii. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ul>	

#### **U245 Munafeul Aaza (Physiology and Biochemistry) II**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE -10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio based on practical records
Each Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. OSPE – 10 stations – (60 minutes) - (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> <p>The total mark for the Practical cum Viva voce Examination is 100.</p>	
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>ii. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ul>	

## U257 Ilmul Advia (Unani Pharmacology) II

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"><li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li><li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li><li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li></ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"><li>i. OSPE – 10 stations - (80 marks)</li><li>ii. Viva voce Examination - (20 marks)</li></ul> The total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"><li>i. First attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li><li>ii. Repeat attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 100)</li></ul>	

## U267 Dawa Sazi (Unani Pharmaceuticals)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"><li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li><li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li><li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li></ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"><li>i. Pharmacy based practical examination - (80 marks)</li><li>ii. Viva voce Examination - (20 marks)</li></ul> Total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"><li>i. First attempt</li></ul>	

(Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 80) + CA [20]
ii. Repeat attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 100)

### **U276 Ilmut Taklees (Calcinology)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Pharmacy based practical examination – (60 minutes) (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> Total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 100)</li> </ul>	

### **3.1. The Academic Programme – Third Year BUMS**

U317 Tahaffuzi wa Samaji Tibb (Unani Preventive and Social Medicine)

U324 Ilmus Sumoom (Unani Toxicology)

U336 Usool e Ilaj wa Ilaj Bit Tadbeer (Unani Fundamentals of Therapeutics and Regimenal Therapy)

U346 Usool e Tashkhees, Sareeriyat wa Ilmul Amraz (Unani Principles of Diagnosis, bed side clinic and Pathology)

U355 Pathology

U363 Research Methodology and Medical Statistics

### **U317 Tahaffuzi wa Samaji Tibb (Unani Preventive and Social Medicine)**

#### **Core Topics**

Introduction to Tahaffuzi wa Samaji Tibb, Tareekh e Hifzan e Sehat, Introduction and applied aspect of Asbab and Asbab e Sitt e Zarooriya, Introduction and applied aspect of Asbab e Ghair Zarooriya,

Asarat e Mosam wa awarizath, Hifzan wa taraqqi Karna e Sehat, Jismani Safaiyya, Ilm e wabae, Hifz e Mataqaddam of Muta'addi amraz, Hifz e Mataqaddam of ghair e Muta'ddi amraz, Preventive aspect of Hammam, Dalak, and Riyazat.

Definitions and determinants of health, spectrum of disease, health education, disease prevention, health promotion, health indicators, vital statistics, demographic transition, epidemiological triad, terminology and definitions in epidemiology, dynamics of disease transmission, prevention and control of communicable and non-communicable diseases, immunization, environmental pollution and human health, family planning, port health.

### **Teaching and learning methods:**

Interactive lectures, team-based learning, and other small group activities, practical classes (OPD), Preventive and Social Medicine Museum sessions, role play, Student presentations, assignments and projects, small group learning activities, community-based health awareness activities and other field health activities.

### **Practical training:**

Health Promotion and disease prevention Clinics at OPD; measuring status of health, Identifying the clinical manifestations of communicable and non-communicable diseases and applying appropriate preventive measures, Community outreach health awareness programmes /Medical camps, preventive strategies, Preventive and Social Medicine Museum sessions, role play. Field visits: Water treatment plant, Slaughter House.

**Duration:** 165 (Theory hours - 75, Practical hours - 90)

**Credits:** 07

### **Recommended Readings:**

1. Grunner O Cameron. A treatise on the canon of Medicine of Avicenna. London: Luzac and Co; 1930.
2. Ibn Sina. *Al Qanoon fit Tib* (English Translation of the critical Arabic text). Book 1. Jamia Hamdard, New Delhi; 1993.
3. Ibn Sina. *Al Qanoon fit Tib* (Urdu translation by Kantoori GH). Vol-II. New Delhi: IdaraKitabushShifa; 2007.
4. Mazhar H Shah. The General Principle Avicenna's Canon of Medicine. New Delhi: IdaraKitabushShifa; 2007.
5. Mohammad bin Zakariya Razi. *KitabulHawi fit Tib*. Vol 1-23. New Delhi: IdaraKitabushShifa; 2010.
6. Park K. Text Book of Preventive and Social Medicine. 23<sup>rd</sup> ed. Jabalpur: Banarasidas Bhanot; 2015.

## **U324 Ilmus Sumoom (Unani Toxicology)**

### **Core Topics**

Introduction of Ilmus Sumoom, Definition of Sum, Historical aspects, *Aqsam e Sum*, General management of poisoning, First aid measures and special management, Triyaq, Nabathi Zahar, Haiwani Zahar, Ma'dani Zahar, Occupational and industrial toxicology, Agrochemicals, Tasammum e ghiza, substance abuses, Laws and Legislations in Toxicology, Medico legal aspects and responsibilities in a case of poisoning.

**Teaching and Learning Methods:**

Lectures, Assignments, Small group activities, presentations, Problem based learning.

**Practical Training:**

Identification of Nabathi Zahar, Haiwani Zahar wa Ma'dani Zahar Ilmus Sumoom Museum sessions, Students' presentations, Assignments and project reports, Case studies and Educational field visits: National Zoological Garden, Traditional Sarpavisha Vedakama practicing places, Drugs and Alcohol Rehabilitation centers.

**Duration:** 75 (Theory hours - 45, Practical hours - 30)

**Credits:** 04

**Recommended reading:**

1. Allison LA. Fundamentals of Molecular Biology. 2nd ed. Collage of William and Mary. Williamsburg. USA
2. Henry Methew A, A H Lawson, Treatment of acute poisoning
3. Ibnu Sina. Al Qanun Fit Tib (Urdu translation by Hakeem Sayyed Ghulam Husnain Kanturi). Vol. II and III. New Delhi; Idara Kitab –us – Shifa;
4. Knight, Bernard. Legal Aspect of Medical Practice. Edinburgh: Churchill Livingstone; 1976
5. Mohammad kabeeruddeen. Makhzanul Mufradat. New Delhi: Idara Kitabu Shifa; 2010
6. Pillay VV. Modern Medical Toxicology. 3rd edition. New Delhi; Jaypee Brothers. 2005.
7. Raveendra Fernando. Management Poisoning. NPIC, NHSL. 2002.
8. Shepherd, Richard. Simpson's Forensic Medicine. 12th ed. London: Arnold; 2003
9. Victor W, Rodwell, Bender D, Kathleen MB, Kennelly PJ, Weil PA. Harpers Illustrated Biochemistry. 29th ed. The McGraw – Hill Companies. 2012
10. W.D.S. Maclay, Clinical Forensic Medicine.

**U336 Usool e Ilaj wa Ilaj Bit Tadbeer (Unani Fundamentals of Therapeutics and Regimenal Therapy)****Core Topics**

Fundamentals of treatments and the objectives, Factors to be observed in Ilaj, Classification of Ilaj and their descriptions, Ilaj bil Taghziya (Diet therapy), Ilaj Bil Advia (Pharmaco therapy), Usool Ilaj (Principles of therapeutics) of common diseases. Ilaj Bil Tadbeer (Regimenal therapy) and their principles of application, Nuzj (Coction), Is'hal (Therapeutic Purgation), Huqna (Enema), Qai (Emesis), Ta'reeq (Diphoresis), Idrar (Diuresis), Tanfees (Expectoration), Imala (Diversion), Nutool (Irrigation), Su'oot (Errhine Therapy), Amal e Ka'i (Cauterization), Dalak (Massage), Hijamat (Cupping), Fasd (Venesection), Irsal e Alaq (Leeching), Takmeed (Fomentation), Riyazat (Exercise), Hamam (Bath), and other IBT procedures and their applications.

**Teaching and Learning Methods:**

Interactive lectures, team-based learning, and other small group activities, student presentations, assignments and projects, small group learning activities.

**Practical Training:**

IPD and OPD Training, Clinical appointments, Medical camps, Health awareness programmes.

**Duration:** 150 (Theory hours - 60, Practical hours - 90)

**Credits:** 06

**Recommended reading:**

1. Ibn Nafees. Kulliyate Nafeesi (Urdu trans. By Kabeeruddin M New Delhi:
2. Ibn Rushd. Kitabu lKulliyat. 2nd ed. New Delhi: CCRUM; 1987.

3. Ibn Sina. Al Qanoon Fil Tibb Vol. 1(English) Dep. Of Islamic Studies, Jamia Hamdard, 1993
4. Ibn Sina. Al Qanoon Fil Tib (Arabic). Lebanon: DAR al-KOTOB al-ILMIYAH; 1999.
5. Ibn Sina. Al Qanoon fit Tib. (Urdu translation by Kantoori GH). Vol.3. Part 2. New Delhi: IdarakitabusShifa.
6. Jeffrey I., Elise M. M., Brett Donald A. Bergman. The Complete Guide to Life Long Nutrition Power of prevention American College of Endocrinology 1993, USA.
7. Majoosi ABA. Kamilus Sanaa (Urdu trans. by Kantoori GH) Vol I & II. New Delhi: IdarakitabusShifa
8. Muthalib AM, Nifras MMM. Bloodletting Regimens of Ilaj bit Tadbeer and Panchakarma. Islamic Book House, 2021.
9. Salma MLU, Maheez MCM. Fundamental Principles of Unani Treatment (Kulliyat e Ilaj). Read more Publication. 1st Edition 2022.
10. Seyyad Mohamed Kamaluddeen Husain Hamdani, Usool e Tibb, Kawmy, New Delhi.
11. Sithy Fowziya AW. Basic Principles of Treatment in Unani Medicine (Kulliyath e Ilaj). 2007
12. Srilakshmi B. Dietetics. Sixth Edition. New Age International Publishers.1993, India.
13. Shiffa MSM., Fahamiya N. Ilaj Bit Tadbeer: Regimenal Therapy in Unani Medicine. Islamic Book House: 2017.
14. Wolever, TMS. The GIyaemic Index. A Physiological Classification of Dietary Carbohydrates. CPI Antony Raw 2010.UK.
15. Zakariya Razi.A.M.B. Kitab Al Havi (Urdu). [trans.by](https://www.trans.by) CCIUM New Delhi: 1999

### **U346 Usool e Tashkhees, Sareeriyat wa Ilmul Amraz (Unani Principles of Diagnosis, Bed Side Clinic and Pathology)**

#### **Core Topics**

Introduction to the subject, History taking, Basic introduction to general examination and commonly used instruments, Ilmu Halat e Badan (States of body), Ajnas e Amraz (Classification of Diseases), Darjat e Amraz (Stages of disease), Ilmul Asbab (Aetiology), Ilmul Alamat (Symptomatology), Alamat e Mizaj (Features of Temperament), and Significance of Bole (Urine), Baraz (Faeces), Nabz (Pulse), Khoon (Blood) and Busaq (Sputum) in diagnosis. Examination of all systems highlighting and correlating the Unani and modern medical concepts.

#### **Teaching and Learning Methods:**

Interactive lectures, Clinical exposure, small group activities, Student presentations and Assignments

#### **Practical training:**

IPD and OPD Training, Clinical appointments, Medical camps, Health awareness programmes.

**Duration:** 150 (Theory hours - 60, Practical hours - 90)

**Credits:** 06

#### **Recommended reading:**

1. Ibn Nafees. KulliyateNafeesi (Urdu trans. By Kabeeruddin M) New Delhi:
2. Ibn Rushd. KitabulKulliyat. 2nd ed. New Delhi: CCRUM; 1987.
3. Ibn Sina. Al Qanoon Fil Tib (Arabic). Lebanon: DAR al-Kotob Al-Ilmiyah; 1999.
4. Ibn Sina. Al Qanoon fit Tib. (Urdu translation by Kantoori GH). Vol.3. Part 2. New Delhi: IdarakitabusShifa.
5. Majoosi ABA. Kamilus Sanaa (Urdu trans. by Kantoori GH) Vol I & II. New
6. Usool e Tibb by Doctor Hakeem.Seyyed Mohammed Kamaluddeen Husain Hamdani p. 117 - 295 .

7. Michael S, Stuart Mason. Hutchison's Clinical methods. 18th ed. East Sussex:
8. Graham D et al. MacLeod's Clinical Examination. 11th ed. Edinburgh:

### **U355 Mahiyatul Amraz (Pathology)**

#### **Core Topics**

Introduction, cell injury, cellular adaptations and ageing, immunopathology: amyloidosis, derangements of homeostasis and haemodynamics, inflammation and healing, infectious and parasitic diseases, neoplasia, environmental and nutritional diseases, haematopoietic system and disorders of erythroid series, disorders of platelets, leucocytes and lympho-reticular tissues, bleeding disorders, pathology of: cardiovascular, respiratory, gastro intestinal, liver and biliary tract, pancreas, urinary tract, female and male genital tract, nervous, musculoskeletal, endocrine systems, breast: diseases and tumours, selected dermatoses, parasitology, medical microbiology, sterilization and disinfections.

#### **Teaching and Learning Methods:**

Lectures, Practical, Case Studies, Group Discussions, Presentations, Clinical Appointments.

#### **Practical Training:**

Laboratory Training, Demonstration of Pathological Specimens, Interactive Based Software, Interpretation of Pathological Reports

**Duration:** 105 (Theory hours - 45, Practical hours - 60)

**Credits:** 05

#### **Recommended reading:**

1. Anderson, W.A.D, Kissane, J.M. Pathology. (7<sup>th</sup> ed.). Saint Louis: CVMosby; 1977.
2. Bogitsh, B, Carter, C, Oeltmann, T, Roitt, I, Wakelin, D. Human Parasitology. (5<sup>th</sup> ed.): Elsevier; 2018.
3. Levison, D.A, Reid, R, Harrison, D.J, Fleming, S, Burt, A.D. Muir's Textbook of Pathology. (14th ed.). London: Hodder Arnold Publication; 2008.
4. Govan, A.D.T, Macfarlane, P.S, Callander, ed.). London: Churchill Livingstone; 1994.
5. Greenwood, D, Slack, R, Peutherer, ed.): Churchill Livingstone Elsevier; 2007.
6. Levison, D.A, Reid, R, Harrison, D.J, Fleming, S, Burt, A.D. Muir's Textbook of Pathology. (14th ed.). London: Hodder Arnold Publication; 2008.
7. Mims, C, Dockrell, H.M, Goering, R.V, Roitt, I, Wakelin, D. Medical Microbiology. (3rd ed.): Elsevier Mosby; 2004.
8. Mohan, H. Textbook of Pathology. (5th ed.). New Delhi: Jaypee Brothers; 2005.
9. Walter, J.B, Talbot, I.C. General Pathology. (7th ed.). London: Churchill Livingstone; 2004.

### **U363 Research Methodology and Medical Statistics**

#### **Core Topics**

Definition of research, types of research, Research problem, Research topic selection, Literature review, Plagiarism, Preparation of questionnaire, Types of Statistical variables, Data collection methods, Research design, Development of Hypothesis, Research report writing, Data Presentation, Descriptive Statistics, Measures of Dispersion, Shapes of the data set- Normal distribution, Sampling methods - Simple random sampling and other sampling methods, Survey research, Probability, Standard Error and Confidence Interval, Hypothesis Testing: Hypothesis statement, Null and Alternative Hypothesis, Type I and Type II errors, P value and conclusion, Decision rules, Testing of



Hypothesis by using Z- Test, Region of Acceptance, One Tailed Test and Two Tailed Test, C Testing of Hypothesis by using; One Sample t-Test, Two Sample t- Test, Testing of Hypothesis by using;  $\chi^2$  (Chi-square) Test.

### Teaching and Learning Methods:

Interactive lectures, small group activities, Student presentations, Assignments and practical classes (data analysis)

**Duration:** Theory hours - 45

**Credits:** 03

### Recommended Readings

1. Blen M. An Introduction to Medical Statistics. Oxford University Press; 1996.
2. Health research methodology, A guide for training in research methods, 2<sup>nd</sup> ed. Manila, World Health Organization Regional office for the Western Pacific; 2001.
3. Kumar R. Research Methodology, A Step by Step guide for Beginners, Pearson Education, Singapore; 2005.
4. Park K. Park's Text Book of Preventive and Social Medicine. 24th ed. BaharsidasBhanot Publishers; Genre. 2017.
5. Singh I. Elementary Statistics for Medical workers. Jaypees Brothers, New Delhi; 1990.
6. Sharma P.V. Ayurvediya Anusandhana Paddhati, Chaukhambha Orientalia, Varanasi India; 1999.
7. Suresh Babu S. Research Methodology for Ayurvedic Scholars, Chaukhambha Orientalia Varanasi India; 2004.

### 3.1. Examinations of the Third Year BUMS

#### U317 Tahaffuzi wa Samaji Tibb (Unani Preventive and Social Medicine)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	Portfolio based on practical and community engagements
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ol> <b>2. Clinical cum Viva voce Examination</b> <ol style="list-style-type: none"> <li>OSPE+OSCE - 10 stations - (60 minutes) - (80 marks)</li> <li>Viva voce Examination - (20 marks)</li> </ol> The total mark for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ol style="list-style-type: none"> <li>First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA</li> </ol>	

[20]
ii. Repeat attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 100)

### U324 Ilmus Sumoom (Unani Toxicology)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE -10 stations (60 minutes)
Continuous Assessments (CA) II	Assignment
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Practical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. OSPE 10 stations – (60 minutes) - (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> The total mark for the Practical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 100)</li> </ul>	

### U336 Usool e Ilaj wa Ilaj Bit Tadbeer (Unani Fundamentals of Therapeutics and Regimenal Therapy)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE – 10 stations - (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b>	

i. Long case – 01 (60 minutes) The total mark for the Clinical cum Viva voce Examination is 100.
Formula used to calculate the final marks of the subject; i. First attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}$ ii. Repeat attempt $(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100$

### **U346 Usool e Tashkhees, Sareeriyat wa Ilmul Amraz (Unani Principles of Diagnosis, Bed Side Clinic and Pathology)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE – 10 stations - (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20) ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5) iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2) <b>2. Clinical cum Viva voce Examination</b> i. Long case – 01 - (60 minutes) The total mark for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; i. First attempt $(\text{Theory Examination [100]} + \text{Clinical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}$ ii. Repeat attempt $(\text{Theory Examination [100]} + \text{Clinical cum Viva voce Examination [100]}) / 200 \times 100$	

### **U355 Mahiyatul Amraz (Pathology)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE – 10 stations - (60 minutes)
Continuous Assessments (CA) II	OSPE – 10 stations - (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b>	

<ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul>
<p>2. Practical cum Viva voce Examination</p> <ul style="list-style-type: none"> <li>i. OSPE – 10 stations - (60 minutes) - (80 marks)</li> <li>ii. Viva voce Examination - (20 marks)</li> </ul> <p>The total mark for the Practical cum Viva voce Examination is 100.</p>
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>ii. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Practical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ul>

### U363 Research Methodology and Medical Statistics

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	SEQ – 4 Questions (60 minutes)
Continuous Assessments (CA) II	Assignment
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<p>1. Theory Component</p> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul>	
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>iii. First attempt  <math display="block">(\text{Theory Examination [100]} / 100 \times 80) + \text{CA [20]}</math> </li> <li>iv. Repeat attempt  <math display="block">(\text{Theory Examination [100]} / 100 \times 100)</math> </li> </ul>	

### 4.1. The Academic Programme – Fourth Year BUMS

U418 Moalejat (Unani Medicine) I

U426 Moalejat (General Medicine) II

U435 Deshiya Chikitsa (Indigenous Medicine) I

U447 Amraz e Ain, Uzn, Anf, Halqwa Asnan (Unani Ophthalmology and Diseases of Ear, Nose, Throat and Dentistry)

U457 Amraz e Atfal (Unani Paediatrics)

U463 Tibbe Qanoon (Forensic Medicine)

U476 Research Project

## **U418 Moalejat (Unani Medicine) I**

### **Core Topics**

Amraz e Mafasil wa Azlat: Wajaul Mafasil, Amraz e Dhimagh wa A'sab: Suda, Falij, Laqwa, Duar, Sadr, Subat, Sarsam, Amraz e Jild: Nar e Farsi, Amraz e Sha'ar, Da us Sadaf, Bars, Sa'affa, Da ul Faqa, Jarab, Habus Shabab. Amraz e Dhimagh wa A'sab: Nisyan, Sara', Sakta, Jumood, Tashannuj, Ra'sha, Khadar, Kuzaz wa Tamadud, Ikhtilaj, Jumood, Amraz e Jild: Garma Dana, Hikka, Sharra', Da ul Hayya, Massae, Saleel, Qurooh e Jild. Wa Amraz e Azfar, Amraz e Nizam e Tanaffus: Nazla wa Zukam, Sual, Nafs ud Dumm, Iltihab e Sho'b, Zeequn Nafs, Zatur Ri'a, Zatul janb, Sil wa Diq, Amraz e Mari, Me'da wa Am'a: waram e Mari, Qurooh al Mari, Sartan e Mari, taqhaqar mari wa meda, Soo-e-Mizaj e Meda, Zof e Meda, Voje-ul-Meda, Nafkha, warama e Meda, Dubaila e Meda, Qurooh e Meda, Qai, Qai ud Dumm, Inqilab e meda, Is'hal, Is'hal ud Dumm, Zaheer, Maghs, Sahaj, Qoolanj, Deedan e Am'a, Bavaseer, Nawaseer, Shiqaul Miq'ad, Istirkha e Miq'ad, Khurooj e Miq'ad.

### **Teaching Learning Methods:**

Interactive lectures, small group activities, Student presentations and Assignments.

Practical Training: Clinical exposure at NAH, Borella

**Duration:** 210 (Theory hours - 75, Practical hours - 135)

**Credits:** 08

### **Recommended reading:**

1. Ibn Sina, Al Qanoon Fit Tib. (Urdu trans. by Kantoori GH) Vol III. New Delhi: Idara Kitab-us-Shifa; 2010.
2. Mazhar H Shah. The General Principles of Avicenna's Canon of Medicine. New Delhi: Idara Kitabush Shifa; 2007
3. Ibn Sina. Al Qanoon fit Tib (English Translation of the critical Arabic text). Jamia Hamdard, New Delhi; 1993
4. Khan MA. Al-Ikseer. New Delhi: Ejaz Publishing House; 2003.
5. Majoosi ABA. Kamilus Sanaa (Urdu trans. by Kantoori GH) Vol I & II. New Delhi: Idara Kitab-us- Shifa. Publication;2002.
6. Razi ABZ. Al Hawi Fil Tib (Urdu). New Delhi: CCRUM
7. Tabri AR. Firdausul Hikmat. (Urdu trans. by Hakeem MA Shah). Deoband: Faisal
8. Ibn-Hubal AHABAB, Kitabu-ul-Mukhtarat Fil-Tibb Urdu translation 1<sup>st</sup> ed. New Delhi: CCRUM; 2005
9. Hakeem Kabeeruddeen. Sharah e asbab. New Delhi. Idara Kitab-us- Shifa; 2010.

## **U426 Moalejat (General Medicine) II**

### **Core Topics**

Principles of Medicine, Cardiovascular disorders: heart diseases, vascular disorders, Blood disorders, Diseases of the Respiratory system: Upper and lower respiratory tract disorders, obstructive pulmonary disorders, and tuberculosis, Alimentary Tract disorders: Oesophageal, gastric, intestinal, and anal disorders, Hepatobiliary disorders, pancreatic disorders, Genito- urinary disorders, Muscular-skeletal disorders: Connective tissue diseases: kin disorders, Endocrine Diseases: diabetes mellitus, obesity, Neurological disorders, Psychiatric disorders, Malignancies, Special investigations: ECG, interpretation of medical imaging, and laboratory tests.

**Teaching and Learning Methods:**

Lectures, Practical, Case Studies, Group Discussions, Presentations

**Practical training:**

IPD and OPD Training, Practical in Skill Laboratory, Clinical Trainings at Selected Training Centers

**Duration:** 150 (Theory hours - 60, Practical hours - 90)

**Credits:** 06

**Recommended reading:**

1. Colledge, N.R, Walker, B.R, Ralston, S.H. Davidson's Principles & Practice of Medicine. (21 ed.). Edinburgh: Elsevier; 2010.
2. Houghton, A.R, Gray, D. Chamberlain's Symptoms and Signs in Clinical Medicine. (13 ed.). London: Hodder Arnold Publication; 2010.
3. Kumar, P, Clark, M.L. Kumar & Clark's Clinical Medicine. (7<sup>th</sup> ed.). Edinburgh: Elsevier;
4. Price, F.W, Scott, R.B. Price's Textbook of the Practice of Medicine. (10 ed.). London: Oxford University Press; 1966.

**U435 Deshiya Chikitsa (Indigenous Medicine) I****Core Topics**

Introduction to the subject and classification of age, Art of history taking, Indigenous knowledge regarding the local medicinal herbs, Sarma rogam, Udaivu Murivu, Chalak, Vasi wa munchana, Vaatha rogam. Paampuk kadi, Diseases of digestive tract, Naayana rogam, Siruvar noiha, Vayitrottam, Moolaroham, Maandam, Renal Diseases.

**Teaching Learning Methods:**

Interactive lectures, team-based learning, and other small group activities, student presentations, assignments

**Practical Training:**

OPD, Ward

**Duration:** 135 (Theory hours - 45, Practical hours - 90)

**Credits:** 05

**Recommended reading:**

1. Ettu Maruthuvam. Department of Ayurveda: Colombo;
2. Hamarneh, Sami Khalaf. Yunani (Unani), Arabic and Islamic Medicine and Pharmacy: Hamdard Foundation: Pakistan; 1997.
3. Haroon M A. Thirukkuran Iyatka Maruthuvam. 6<sup>th</sup> edition: Abu pathippakka:Chennai ;2009.
4. Higuchi, Machiko. Traditional Health Practice in Sri Lanka. Amsterdam: Netherlands: VU University; 2002.
5. John C A. Outline of Fracture. 8th ed: Churchill Livingstone New York;1983.
6. Kathiresan A. Noiynri Vaazhka. 1 st ed: Pavai publication: Chennai:2004.
7. Standard operating procedures for HIJAMA (Cupping therapy) Central Council for Research in Unani Medicine, Ministry of Ayush, Government of India.
8. Tibbun nabavi-Ibnul Qayyim (English)
9. Deshiya chikithsa sanghrahaya,
10. Vaidika Sarasankshapa, Chandra R. S, Kumarasingha A.
11. Kasaya sanghrahaya, Devamitta thera G. S.
12. Peenas Veda Potha, Girimananda thera B.

13. Es Veda Potha, Daraniyagala P. A. P.
14. Perani Guli Kalka Potha, Gunasena D.
15. Vaidika Sarasankshapa, Chandra R. S, Kumarasingha A.
16. Purana Handhi Veda Potha, 7. Girimananda thera
17. Sarpa Visha Vaidya Pradeepaya, Rev. Gunarathana Vanshalankara Thero
18. Visha vaithya sinthamani

## **U447 Amraz e Ain, Uzn, Anf, Halqwa Asnan (Unani Ophthalmology and Diseases of Ear, Nose, Throat and Dentistry)**

### **Core Topics**

#### **Part A: Amraz e Ain, Uzn, Anf, Halqwa Asnan**

Tashreeh-Va-Af'al-e-Ain, Amraz e Ajfan, Amraz e Multaheemah, Amraz e sulbiyah, Amraz e Qarniyah, Amraz e Rutubat Jaleediya, Amraz e Rutubat e Baiziyah, Amraz e Basarat, Jism ghareeb va Zarbul Ain. Tashreeh-Va-Af'al-e-Uzn, Voj ul Uzn, Behrapen, Taneen, Duwar, Jism ghareeb ul Uzn, Seilan Uzn, Varm e Aslul Uzn. Tashreeh-Va-Af'al-e-Anf, Izterab Sham, Sudda e Anf, Iltihab Tajaweefe Anf, Bawaseer e Anf, Nakseer, Jism ghareeb fil Anf, Tashreeh va Af'al e Jauf e Famm, Tashreeh va Af'al e Asnaan va Lissa, Amraz e Lissa, Amraz e Dehen, Amraz e Lisan va Shiffat, Amraz e Asnan, Tashreeh wa Af'al Halq wa Hanjara, Amraz e Hanjarah, Amraz e Halq, Amraz e Ghudad e Darqiyyah, Sartaan Jaufe Famm.

#### **Part B: ENT, Ophthalmology and Oral Medicine**

Ophthalmology: Refractive errors, strabismus, conjunctival diseases, glaucoma, corneal diseases, diseases of the sclera, cataract, vascular retinopathies, retinal detachment, optic nerve diseases, intraocular tumours and diseases of the eye lids. Diseases of ear: otalgia, tinnitus, otosclerosis, Meniere's disease, deafness, tumours of the ear, Diseases of nose: diseases of external nose, congenital deformities, tumours, rhinitis, nasal polyps, epistaxis, diseases of paranasal sinuses. Diseases of throat: Pharyngitis, laryngitis, adenoiditis, tonsillitis, abscesses in pharynx. Oral Medicine and Dentistry: Periodontal diseases, gingivitis, pericoronitis, odontogenic and non-odontogenic tumours, pre-malignant conditions, oral cavity carcinomas, dental caries, dental hard tissue disorders, glossitis and stomatitis.

### **Teaching Learning Methods:**

Lectures, Practical, Case studies, Group Discussions, Assignments, Small group activities, Students' presentations, and Problem-based learning. Self-directed learning.

### **Practical Training:**

IPD and OPD Training, Clinical appointments, Practical in Skill Laboratory, Clinical Training at selected training centers

**Duration:** 165 (Theory hours - 75, Practical hours - 90)

Theory - 75 hours (*Amraz e Ain, Uzn, Anf, Halq wa Asnan* – 55 hours, ENT, Ophthalmology and Oral Medicine – 20 hrs.)

Practical - 90 hours (*Amraz e Ain, Uzn, Anf, Halq wa Asnan* - 90)

**Credits:** 07

### **Recommended reading:**

1. Razi, AMBZ, Kitabul Mansuri (Urdu translation), CCRUM, New Delhi, 1991.
2. Razi ABZ. Al Hawi Fil Tib. Vol. II & III, New Delhi: CCRUM
3. Masihi AAFIA. KitabalUmda Fil Jarahat. Vol I. New Delhi: CCRUM; 1986.

4. Ibn Sina, Al Qanoon fil Tib. Vol II
5. Bansal M. *Diseases of Ear, Nose and Throat & Head and Neck Surgery*. India: Jaypee Brothers Medical Publishers (P) LTD; 2013.
6. Cawson RA, Odell EW. *Essentials of Oral Pathology and Oral Medicine*, London: Elsevier Limited; 2002.
7. Dhingra Pl, Dhingra S. *Diseases of Ear, Nose and Throat & Head and Neck Surgery*. New Delhi: Elsevier Relx India Pvt Ltd; 2018.
8. Jogi R, *Basic Ophthalmology*. India: Jaypee Brothers Medical Publishers (P) LTD; 2016.
9. John J. *Textbook of Preventive and Community Dentistry*. New Delhi: CBS Publishes and Distributors PVT Ltd; 2017
10. Khurana AK, *Comprehensive Ophthalmology*. New Delhi: New Age International (P) Limited; 2012.
11. Sihota R, Tandon R. *Parsons Diseases of the eye*. India: Reed Elsevier India Private Limited; 2013

## **U457 Amraz e Atfal (Unani Paediatrics)**

### **Core Topics**

#### **Part A - Amraz e Atfal**

Introduction to the subject and classification of age, Art of history taking, Naumuladatki Naghidasht wa Parwa, Amraz e Naumauladat, Raza'at, Fitham, Ma'alim, Naqz e Taqziya, Amraz Amraz e Me'ada wa Am'a wa Jiggar, Amraz e Nizam Tanaffus, Amraz e Qalb wa Dam in Atfal, and Amraz e Nizam e Kulya wa Masana. Hummiyat e Atfal, Amraz e Dimagh wa Asab, Amraz e Jild, Amraz e Wabai, Amraz e Mafasil, Amraz e Tanasulya, Khilqi Amraz, Tanaqusul Leham, Siman e Mufrat in Atfal, Boul fil farash, Langra Bachcha, KanKamai, Warm e Uzun Barid, Ramaad, Kaboos e Atfal, Fataq, Qeela maieeya and Emergency therapy in Unani

#### **Part B – Pediatrics**

Importance of child health, perinatal/neonatal/infant mortality in Sri Lanka, Examination and care of newborn, pre-term and small for date babies, Neonatal problems, growth and development, Nutritional deficiency, Pediatric emergencies, Gastrointestinal disorders, Cardiovascular disorders, Anemia, Thalassemia, Upper and lower respiratory tract disorders, childhood fever, Hereditary diseases, Myopathy, Juvenile diabetes, Neurological disorders, and Urinary tract disorders.

### **Teaching Learning Methods:**

Lectures, Practical, Case studies, Group discussions, Students presentations

### **Practical Training:**

Clinical appointments in relevant field, Practical in Skill laboratory, Clinical Trainings at selected training centers.

**Duration:** 165 (Theory hours - 75, Practical hours - 90)

**Credits:** 07

### **Recommended reading:**

1. Hkm Khursheed Ahmad Shafaqat Azmi. Amraz e Atfal. Eijaz Pub. House, 2006
2. Hkm Mohammed Rafeeq Hijaji. Aiyna Amraz e Atfal. Idara Kitab Ul Shifa
3. Hkm Mohammed Yusuf Ansari. Amraz e Atfal. Idara Kitab Ul Shifa, 2009
4. Hkm Wasim Ahamed. Amraz e Atfal. Idara Kitab Ul Shifa
5. IbnSina. Al Qanoon FilTib. (Urdu trans. by Kantoori GH). VolIII&IV. New Delhi: IdaraeKitabulShifa; 2007.



6. Razi ABZ. Al Hawi Fil Tib. Vol IX. New Delhi: CCRUM; 2001. (Relevant Chapters)
7. Tom Lissauer. Illustrated Text book of Paediatrics. 5th Edition.
8. Vinod K Paul and Arvind Bagga. Ghai Essential Paediatrics. 9th Ed.

### **U463 Tibbe Qanoon (Forensic Medicine)**

#### **Core Topics**

Introduction to Forensic Medicine and Medico legal system in Sri Lanka, Medical Ethics, Medical evidence, medical negligence, Mechanical injuries, Legal classification of injuries, Injuries due to physical and chemical agents, Regional injuries: Head injuries, chest and abdominal injuries, Firearm and explosive injuries, Injuries due to Road traffic events, Identification issues in Forensic medicine and Introduction to DNA technology and finger printing, Death related issues- Definition of death, social and legal consequences of death, Diagnosis and Certification of death, Changes after death, Estimation of time since death, Inquest, Domestic violence, Sexual Offenses, Child Abuse, Criminal Abortion, Infanticide, Asphyxia. Alcohol Intoxication.

#### **Teaching and Learning Methods:**

Lectures, Assignments, Small group activities, presentations, Problem based learning.

**Duration:** Theory hours – 45

**Credits:** 03

#### **Recommended Readings**

1. Pillay V V. Text Book of Forensic Medicine and Toxicology. Paras Medical Publisher; 2019.
2. Prasad UN. Forensic Medicine Under Indian System of Medicine (Ayurveda). 1<sup>st</sup> edition. CBS Publishers & Distributors Pvt Ltd; 2014.
3. Jayawardena H. Forensic Medicine & Medical Law. Department of Forensic Medicine, University of Kelaniya, Ragama, Sri Lanka; 1996

### **U476 Research Project**

Research project is a partial fulfilment of the BUMS degree which reflects the student's effort and creativity of the subject. This research project will be carried out under Supervised Independent Study.

Supervised Independent Study has been planned to offer a more in - depth study of a precise topic than that is available in the classroom experience under the supervision of an academician with expertise in the field. Student would be able to study how to conduct research, use various research methodologies and arrive at significant conclusions. The content and requirements of the study will be worked out between the supervisor and the student.

**Credits:** 06

### **4.1. Examinations of the Fourth Year BUMS**

#### **U418 Moalejat (Unani Medicine) I**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)

Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul>	
<b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case – 01 (60 minutes)</li> </ul>	
The total mark for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject;	
<ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Practical cum Viva voce Examination [100]) / 200 x 100)</li> </ul>	

#### U426 Moalejat (General Medicine) II

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE - 10 stations (60 minutes)
Continuous Assessments (CA) II	OSPE + OSCE - 10 stations (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul>	
<b>2. Viva voce Examination - (20 marks)</b>	
Formula used to calculate the final marks of the subject;	
<ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Viva voce Examination [20]) / 120 x 100)</li> </ul>	

**U435 Deshiya Chikitsa (Indigenous Medicine) I**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case - 01 (60 minutes)</li> </ul> The total mark for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100] ) / 200 x 100)</li> </ul>	

**U447 Amraz e Ain, Uzn, Anf, Halqwa Asnan (Unani Ophthalmology and Diseases of Ear, Nose, Throat and Dentistry)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case – 01 (60 minutes)</li> </ul> The total mark for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ul style="list-style-type: none"> <li>i. First attempt</li> </ul>	

<p>(Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</p> <p>ii. Repeat attempt</p> <p>(Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 100)</p>
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#### U457 Amraz e Atfal (Unani Paediatrics)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case - 01 (60 minutes)</li> </ul> <p>The total mark for the Clinical cum Viva voce Examination is 100.</p>	
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt</li> <li>(Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt</li> <li>(Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 100)</li> </ul>	

#### U463 Tibbe Qanoon (Forensic Medicine)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE – 10 stations (60 minutes)
Continuous Assessments (CA) II	SEQ – 4 Questions (60 minutes)
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Viva voce Examination - (20 marks)</b>	
Formula used to calculate the final marks of the subject;	

- |   |
|---|
| i. First attempt<br>(Theory Examination [100] + Viva voce Examination [20]) / 120 x 80) + CA [20]<br>ii. Repeat attempt<br>(Theory Examination [100] + Viva voce Examination [20]) / 120 x 100) |
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### **U476 Evaluation of Research Project**

The evaluation of the research project includes preparation of research proposal, conducting research work, research presentation, and final report.

Marks will be assigned as follows.

Preparation of research proposal	- 10 marks
Conducting research work	- 15 marks
Research Presentation	- 25 marks
Final report	- 50 marks

The total mark for the research project is 100.

### **1.1. The Academic Programme – Fifth Year BUMS**

U518 Moalejat (Unani Medicine) III

U525 Ilmul Jarahat (Unani Surgery)

U536 Amraz e Niswan, QabalatwaNaumaulood (Unani Gynecology, Obstetrics & Neonatology)

U548 Deshiya Chikitsa (Indigenous Medicine) II

### **U518 Moalejat (Unani Medicine) III**

#### **Core Topics**

Introduction to Jigar, Mirrara Va Tihal, Soo e-Mizaj Kabid, Zof e Kabid, Sudad e Kabid Varm e Kabid, Salabat e Kabid, Soo ul Qinya vo Istisqa, Yarqan Hasat e Mirarah, Sudad e Tihal, Varm e Tihal. Soo e Mizaj e Qalb, Zof e Qalb, Khafaqaan, Ghashee, Imtila e Tajweef e Qalb Sudad e Urooq e Qalb, Sudad e Foohat e Qalb, Voj e Qalb, Salabat e Urooq, Imtila (Zaghtud Damm Qawi). General principles of treatment in Amraz-e-kulya vo Masana, Ziabethus Shukri, Ziabethus. Shukri, Soo-e-mizaj kulliya, Voj-e-kulya, Bole ud dumm, Salasilboul, Hiddatul baul&Hirqat ul baul, Hasat-e-kulya vo masana, Zof-e-kulya, Varm-e-Masalih boul, Varm-e-kulya & Ilaj, Hazal-e- kulya &Ilaj. Nuqsan e Bah and abnormalities of, Qazeeb/ Zoaf e Bah, Kasrat e Shahwah Kasrat e Dururul. Mani, Qillat e Mani, Kasrat e Ihtilam, Kasrate In'aadh Qillat e In'aadh, Sur'at e InzaalAmraz e Qadheeb & Amraz e Unsayain. Introduction, Classification of Fevers, Grades of Fever and Stages of Fever,Prognosis of Fever,Complication of Fever, Management of Complications, Pyrexia of unknown origin General Principles of treatment of Fever, Usool-e-Ilaj for Acute Fever and Water,and Diet in the Fever, Hummiyat-e-Yaum Nafsaniyah, Hummiyat-e-Yaum Badaniyah,Hummiyat-e-Yaum Baadiyah,Hummiyat-e-Damawiyah,Humma-e-Safrawiyah, Hummiyat-e-Balghamiyah, Hummiyat-e-Saudawiyah,Humma-e-Diq, , Diq e Mevi, Humma-e-Meeviyah, Humma-e-Ajamiyah. Amraz e Nafsaniya: Kaboos vo Sehar, Ikhtilatuz Zehan, Fasadut Takhayyul, Hamaq, Fasadu Zikr, Mania, Daul Kalb, Melancholia, Qutrub, Nishyan, Sartan General principles of Sartan, Sartan e Ri'a, Sartan e Jiger, Sartan e Meda, Sartan e Ama, Tibbus Shaikhukha (Geriatrics), Tibbun Nafsil musnin – Geriatric, Psychiatry, Ilaajul Amrazus Shaikhukha – Common, Tabi'at related, Special regimes – Malish, Riyazat for, Shaikhukha, Amraz e ghudad e laqanati Saman e Mufrit, Laghripan.

**Teaching Learning Methods:**

Interactive lectures, small group activities, Student presentations and Assignments.

**Practical Training:**

Clinical exposure at NAH, Borella

**Duration:** 210 (Theory hours - 75, Practical hours - 135)

**Credits:** 08

**Recommended Readings:**

1. Ibn Sina, Al Qanoon Fit Tib. (Urdu trans. by Kantoori GH) Vol III. Delhi: Idara Kitabus-Shifa; 2010.
2. Ibn Sina. Al Qanoon Fil Tib (Arabic). Lebanon: DAR al-KOTOB al-ILMIYAH; 1999.
3. Majoosi ABA. Kamilus Sanaa (Urdu trans. by Kantoori GH) Vol I & II. NewDelhi: Idara Kitab-us- Shifa. Publication;2002.
4. Razi ABZ. Al Hawi Fil Tib (Arabic). Lebanon: DAR al-KOTOB al-ILMIYAH; 2000.
5. Razi ABZ. Al Hawi Fil Tib (Urdu). New Delhi: CCRUM
6. Tabri AR. Firdausul Hikmat. (Urdu trans. by Hakeem MA Shah). Deoband: Faisal

**U525 Ilmul Jarahat (Unani Surgery)****Core Topics****Part A - Ilmul Jarahat**

Introduction to Ilmul Jarahat, stages of surgery, Bawaseer, Inshiqaqul miq'ad, Haraq-ul-Naar va Salaq, Sadma, Jarahat, Qurooh, Nasoor/ Majri, Jiryan-ud-Dam, Anorectal Abscess, Khuroojul miq'ad. Sang-e-Gurda Va Masana, Azm Ghuda-e-Mazzi, Khatna, Qurookh-e-Me'ddava Ama, Sudda-e-Ama, HassatulMirrara, Varm-e-Mirara, Iltihab, Varm, Fataq, Amal-e-Kai, Hijamah, Fasd, Irsal Alaq, Pohda va Sartan-e-Kabid, Amraaz-e-Urookh, Amraaz-e-Ghudoodi, Khala, Moonch, Bol-ud- Dam, Qeelmaee, Varm-e-Zaida

**Part B – Surgery**

Surgical Infection, Sterilization, Anaesthesia, Shock, Fluid, Electrolyte, Acid Base Balance and Nutrition, Wounds, Inflammation, Tissue repair and scarring, Trauma, Disorders of neonate, Infant and child, Disorders of urinary tract, Disorders of male and female Genital tract, Disorders of upper gastrointestinal tract, Ulcers, Sinuses and fistulae, Disorders of lower gastrointestinal tract, Disorders of bones and joints, Disorders of thorax, Disorders of breast and endocrine glands, Disorders of arterial, venous and lymphatic system, Cysts, Tumors, Neoplasia, Antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice. Diagnostic techniques – X-ray, Imaging techniques, Ultrasonography.

**Teaching Learning Methods:**

Lectures, Practicals, Case studies, Group discussions, Students presentations

**Practical Training:**

Clinical appointments in relevant fields, Practical in Skill laboratory, Clinical Training at selected training centers.

**Duration:** 150 (Theory hours – 60, Practical hours – 90)

**Credits:** 06

**Recommended reading:**

1. Abul Cassim Zahravi, Al-Tashreef
2. Al-Razi, Kitab al Mansoori

3. Aminuddaula Abu Ibn AL-QufMasihi, Kitabul Umda fil Jarahat
4. Clinical Surgery Alfred Cuscicri, David I Rowley, Pierce A. Grace
5. Muthalib AM. Nifras MMM. Unani Concept and Management in Anorectal Conditions. Islamic Book House, 2021
6. Principles & Practice of Surgery A.P.M. Forrest, D.C.Carter, I.B.MacledIbnSina. Al Qanoon FilTib. (Urdu trans. by Kantoori GH). VolIII&IV. New Delhi: IdaraeKitabulShifa; 2007.
7. Razi ABZ. Al HawiFilTib. Vol IX. New Delhi: CCRUM; 2001. (Relavant Chapters)
8. IbnSina. Al Qanoon FilTib. (Urdu trans. by Kantoori GH). VolIII & IV. New Delhi: IdaraeKitabulShifa; 2007.
9. Razi ABZ. Al HawiFilTib. Vol IX. New Delhi: CCRUM; 2001. (Relevant Chapters)

### **U536 Amraz e Niswan, Qabalat wa Naumaulood (Unani Gynecology, Obstetrics & Neonatology)**

#### **Core Topics**

**Part A - Amraz e Niswan, Qabalat wa Naumaulood:** Tashreeh e Tatbeeqi e A'za e Tanasuliya Va Afal e A'za e Zanana (Applied aspect of anatomy and physiology of female genital organs), History taking and examination related to gynaecology, Khilqi Amraz (Congenital Disorders) Futurat e Haiz (Menstrual Disorders), Amraz e Farj (Diseases of Vulva), Amraz e Mehbali (Diseases of Vagina), Amraz e Unuqur Rehm (Diseases of Cervix), Amraz e Rehm (Diseases of Uterus), Amraz e Qazif (Diseases of Fallopian tube), Amraz e Khussiyatur Rehm (Diseases of Ovary), Ikhtinaqur Rehm Va Ta'alluk Amraz (Hysteria and related diseases) Uqr (Sub fertility), Amraz e Sadiyan (Diseases of Breast), Importance of family health and contraceptive practices, Sin e Ya's (Menopause), Sartan e Az'a e Tanasuliya e Zannana (Genital Tract Malignancy, Marz Akyas Tehrizi Hauzi (Pelvic Inflammatory Disease), Atishak and Sozak (Syphilis and Gonorrhoea), Amraze naumoolat (neonatal disease), Congenital malformation of female genital organs, puberty, disorders of menstrual cycle, menopause, subfertility, pelvic infections, displacement of uterus, benign and malignancies in gynaecology, endometriosis and adenomyosis, sexual transmitted disorders, urinary problem in gynaecology and imaging studies. Tashreeh Va Manafi e A'za e Tanasuliya Zanana (Anatomy and physiology of pregnancy), Kaifiyat e Istiqrar e Hamal (Embryology), Hamal ki Tashkhees Va Tafreeqi Tashkhees (Diagnosis of Pregnancy and differential diagnosis), Hamila ki Naghidashat (Antenatal care), Amraz e Hawamil (Disorders in pregnancy), Tabayee Waza' e Hamal (Normal labour), Ghair Tabayee Wa'za e Hamal (Abnormal labour), Zaman e Nifas Va Awarizat (Puerperium complications), Naw Janeen (Foetus) management embryology, placenta, amniotic cavity, amnion and amniotic fluid, examination and diagnosis of pregnancy, physiological changes during pregnancy, antenatal care, disorders during pregnancy, multiple pregnancy, hydramnios, abnormalities of placenta and cord, antepartum haemorrhage, medical and surgical conditions complicating pregnancy, normal labour and management, induction of labour, pre-term labour, post maturity, intra uterine fetal death, premature rupture of membranes, abnormal uterine action, malposition and mal-presentation, complications of the third stage of labour, normal puerperium and management, abnormalities of the puerperium, contraceptive methods, current knowledge on investigations used in obstetrics.

**Part B – Gynecology and Obstetrics:** Examination and diagnosis of pregnancy, physiological changes during pregnancy, antenatal care, Common Medical Conditions in Pregnancy, Miscarriages,

APH & PPH, Normal Labour, Abnormal Labour, Puerperal Care, Contraceptives & Family planning, Subfertility & ART, Common Gynecological disorders & Menopause, Introduction to sexual & reproductive health, Identification of gynecological malignancies.

**Teaching Learning Methods:**

Lectures, Practical, Case studies, Group discussions, Students presentations

**Practical Training:**

Clinical appointments in relevant field, Practical in Skill laboratory, Clinical Trainings at selected training centers

**Duration:** 210 (Theory hours - 75, Practical hours - 135)

**Credits:** 08

**Recommended reading:**

1. Ibn Sina, Al Qanoon Fit Tib. Vol III
2. Razi ABZ. Al Hawi Fit Tib. Vol IX. New Delhi: CCRUM; 2001.
3. Jurjani I. Zakheerae Khawarzaam Shahi (Urdu trans. by Khan AH). Vol II. New Delhi: Idara Kitab us shifa; 2010.
4. Dutta D. C. Text Book of Gynaecology. 5th ed. India: New Central Books; 2008

**U548 Deshiya Chikitsa (Indigenous Medicine) II**

**Core Topics**

Mahapeetru maruthuvam, Pen noihaal, Peenisa rogam, Erikaayam, Puththunarchi maruthuvam. Diseases of Respiratory system, Noi thaduppu muraihaal, Iraththam kuththi eduththal (Hijama). Visha vaiththiyam, Maa nabi maruthuvam, Kattihal, Putru Noi.

**Teaching Learning Methods:**

Interactive lectures, team-based learning, and other small group activities, student presentations, assignments

**Practical Training:**

OPD, Ward

**Duration:** 135 (Theory hours - 45, Practical hours - 90)

**Credits:** 05

**Recommended reading:**

1. Ettu Maruthuvam. Department of Ayurveda: Colombo;
2. Hamarneh, Sami Khalaf. Yunani (Unani), Arabic and Islamic Medicine and Pharmacy: Hamdard Foundation: Pakistan; 1997.
3. Haroon M A. Thirukkuran Iyatkaal Maruthuvam. 6th edition: Abupathippakka: Chennai; 2009.
4. Higuchi, Machiko. Traditional Health Practice in Sri Lanka. Amsterdam: Netherlands: VU University; 2002.
5. John C A. Outline of Fracture. 8th ed: Churchill Livingstone New York; 1983.
6. Kathiresan A. Noiynri Vaazhka. 1st ed: Pavai publication: Chennai; 2004.
7. Standard operating procedures for HIJAMA (Cupping therapy) Central Council for Research in Unani Medicine, Ministry of Ayush, Government of India.
8. Tibbun nabavi-Ibnul Qayyim (English)
9. Deshiya chikitsa sangrahaaya,
10. Vaidika Sarasankshapa, Chandra R. S, Kumarasingha A.



11. Kasaya sangrahaya, Devamitta thera G. S.
12. Peenas Veda Potha, Girimananda thera B.
13. Es Veda Potha, Daraniyagala P. A. P.
14. Perani Guli Kalka Potha, Gunasena D.
15. Vaidika Sarasankshapa, Chandra R. S, Kumarasingha A.
16. Purana Handhi Veda Potha, 7. Girimananda thera
17. Sarpa Visha Vaidya Pradeepaya, Rev. Gunarathana Vanshalankara Thero
18. Visha vaithya sinthamani

### 5.1. Examinations of the Fifth Year BUMS

#### U518 Moalejat (Unani Medicine) III

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ol style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ol> <b>2. Clinical cum Viva voce Examination</b> <ol style="list-style-type: none"> <li>i. Long case – 01 (60 minutes)</li> <li>ii. Short cases – 04 (10 minutes for each)</li> </ol> The total marks for the Clinical cum Viva voce Examination is 100.	
Formula used to calculate the final marks of the subject; <ol style="list-style-type: none"> <li>i. First attempt  <math display="block">(\text{Theory Examination [100]} + \text{Clinical cum Viva voce Examination [100]}) / 200 \times 80 + \text{CA [20]}</math> </li> <li>ii. Repeat attempt  <math display="block">(\text{Theory Examination [100]} + \text{Clinical cum Viva voce Examination [100]}) / 200 \times 100</math> </li> </ol>	

#### U525 Ilmul Jarahat (Unani Surgery)

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	

<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case - 01 (60 minutes) – 80 marks</li> <li>ii. Short case – 01 (10 minutes) - 20 marks</li> </ul> <p>The total mark for the Clinical cum Viva voce Examination is 100.</p>
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100] ) / 200 x 100)</li> </ul>

### **U536 Amraz e Niswan, QabalatwaNaumaulood (Unani Gynecology, Obstetrics & Neonatology)**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies
Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.	
<b>Summative Examination: Annual and Repeat Examinations</b>	
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case – 01 (60 minutes)</li> </ul> <p>The total marks for the Clinical cum Viva voce Examination is 100.</p>	
<p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100] ) / 200 x 100)</li> </ul>	

### **U548 Deshiya Chikitsa (Indigenous Medicine) II**

<b>Formative Examination: Continuous Assessments (CA)</b>	
<b>Continuous Assessments (CA)</b>	<b>Mode of Examination</b>
Continuous Assessments (CA) I	OSPE + OSCE – 10 stations (60 minutes)
Continuous Assessments (CA) II	Portfolio including 10 case-based studies

Each CA will get 20 marks, and the total of 40 marks from two CAs will contribute to 20% of the marks of the Subject for the first attempt of the Examination.
<b>Summative Examination: Annual and Repeat Examinations</b>
<b>1. Theory Component</b> <ul style="list-style-type: none"> <li>i. MCQ – 20 questions (30 minutes) - 20 marks (1 x 20)</li> <li>ii. SEQ – 5 questions (90 minutes) - 40 marks (8 x 5)</li> <li>iii. Essay – 2 questions (60 minutes) - 40 marks (20 x 2)</li> </ul> <b>2. Clinical cum Viva voce Examination</b> <ul style="list-style-type: none"> <li>i. Long case - 01 (60 minutes)</li> </ul> <p>The total marks for the Clinical cum Viva voce Examination is 100.</p> <p>Formula used to calculate the final marks of the subject;</p> <ul style="list-style-type: none"> <li>i. First attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 80) + CA [20]</li> <li>ii. Repeat attempt (Theory Examination [100] + Clinical cum Viva voce Examination [100]) / 200 x 100)</li> </ul>

**Part VI: Total credits and credits for each subject**

	Direct contact Hours per Credit	Notional Hours per Credit (by SLQF 2015)
Lectures/Tutorials	15	50
Practical/ Language/ Seminars / Student Assignments / Guided Student Presentations / Museum Classes / Demonstrations	30	50
Clinical Work	45	100
Research Project		100

<b>First Year</b>					
<b>Subjects</b>	<b>Lecture Hours</b>	<b>Practical Hours</b>	<b>Independent learning Hours</b>	<b>Notional Hours</b>	<b>No of Credits</b>
<b>Mantiq wa Falsafa</b>	75		175	250	05
<b>Tareekh e Tibb wa Akhlaqiyya</b>	75		175	250	05
<b>Urdu wa Arabic I</b>	120	-	80	200	04
<b>Kulliyat Umoor e Tabiyya wa Dheewaanut Tibb I</b>	90	30	230	350	07
<b>Tashreeh e Badan I</b>	60	60	180	300	06
<b>Manafi ul Aza I</b>	60	60	180	300	06
<b>Ilmul Advia I</b>	60	60	180	300	06
<b>Total</b>	<b>600</b>	<b>210</b>	<b>1200</b>	<b>1950</b>	<b>39</b>

<b>Second Year</b>					
<b>Subjects</b>	<b>Lecture Hours</b>	<b>Practical Hours</b>	<b>Independent learning Hours</b>	<b>Notional Hours</b>	<b>No of Credits</b>
<b>Urdu wa Arabic II</b>	120	-	80	200	04
<b>Kulliyat Umoor e Tabiyya wa Dheewaanut Tibb II</b>	90	30	230	350	07
<b>Tashreeh e Badan II</b>	45	60	145	250	05
<b>Manafi ul Aza II</b>	60	60	180	300	06
<b>Ilmul Advia II</b>	75	60	215	350	07
<b>Dawa Sazi</b>	75	60	215	350	07
<b>Ilmut Taklees</b>	60	60	180	300	06
<b>Total</b>	<b>525</b>	<b>330</b>	<b>1245</b>	<b>2100</b>	<b>42</b>

<b>Third Year</b>					
<b>Subjects</b>	<b>Lecture Hours</b>	<b>Practical Hours</b>	<b>Independent learning Hours</b>	<b>Notional Hours</b>	<b>No of Credits</b>
<b>Tahaffuzi wa Samaji Tibb</b>	75	90	285	450	07
<b>Ilmus Sumoom</b>	45	30	125	200	04
<b>Usool e Ilaj wa Ilaj Bit Tadbeer</b>	60	90	250	400	06
<b>Usool e Tashkhees va Sareeriyat va Ilmul Amraz</b>	60	90	250	400	06
<b>Pathology</b>	45	60	145	250	05
<b>Research Methodology and Medical Statistics</b>	45	-	105	150	03
<b>Total</b>	<b>330</b>	<b>360</b>	<b>1160</b>	<b>1850</b>	<b>31</b>

<b>Fourth Year</b>					
<b>Subjects</b>	<b>Lecture Hours</b>	<b>Practical Hours</b>	<b>Independent learning Hours</b>	<b>Notional Hours</b>	<b>No of Credits</b>
<b>Moalejat (Unani Medicine) I</b>	75	135	340	550	08
<b>Moalejat (General Medicine) II</b>	60	90	250	400	06
<b>Desheeya Chikithsa I</b>	45	90	215	350	05
<b>Amraz e Ain, Anf, Uzn, wa Halq</b>	75	90	285	450	07
<b>Amraz e Atfal</b>	75	90	285	450	07
<b>Forensic Medicine</b>	45	-	105	150	03
<b>Research Project</b>	-	-	-	600	06
<b>Total</b>	<b>375</b>	<b>495</b>	<b>1480</b>	<b>2950</b>	<b>42</b>

<b>Fifth Year</b>					
<b>Subjects</b>	<b>Lecture Hours</b>	<b>Practical Hours</b>	<b>Independent learning Hours</b>	<b>Notional Hours</b>	<b>No of Credits</b>
<b>Moalejat (Unani Medicine) III</b>	75	135	340	550	08
<b>IlmulJarahat</b>	60	90	250	400	06
<b>Amraz e Niswan, QabalatwaNaumaulood</b>	75	135	340	550	08
<b>Desheeya Chikithsa II</b>	45	90	215	350	05
<b>Total</b>	<b>255</b>	<b>450</b>	<b>1145</b>	<b>1850</b>	<b>27</b>

<b>Total Credit Value</b>		
<b>Year</b>	<b>Notional Hrs</b>	<b>Credits</b>
<b>First year</b>	1950	39
<b>Second year</b>	2100	42
<b>Third year</b>	1850	31
<b>Fourth year</b>	2950	42
<b>Fifth year</b>	1850	27
<b>Total</b>	<b>10700</b>	<b>181</b>

## **BUMS Curriculum Development and Evaluation Committee 2023/2026**

1. Professor Pathirage Kamal Perera – Dean
2. Senior Lecturer Dr. JM Dahanayake – Chairperson
3. Senior Lecturer Dr. ALM Ihsan – Secretary
4. Professor MSM Shiffa
5. Professor MUZN Farzana
6. Professor N. Fahamiya
7. Professor MI Manuha
8. Professor RDH Kulatunga
9. Professor KR Weerasekare
10. Professor SKMK Herapathdeniya
11. Professor HD Hapuarachchi
12. Professor SP Molligoda
13. Professor KPKR Karunagoda
14. Associate Professor PR Waratanna
15. Senior Lecturer Dr. AHM Mawjood
16. Senior Lecturer Dr. AG Samarawickrama
17. Senior Lecturer Dr. MHM Hafeel
18. Senior Lecturer Dr. WASS Weerakoon
19. Senior Lecturer Dr. AM Muthalib
20. Senior Lecturer Y.A.U.D. Karunarathne
21. Senior Lecturer Dr. MWSJ Kumari
22. Senior Lecturer Dr. MH Faslul Haq
23. Senior Lecturer Dr. LDR De Silva
24. Senior Lecturer Dr. YSG Wimalasiri
25. Lecturer. Dr. WKBDS Fernando
26. Mr. ML Warnasuriya – Deputy Registrar