



UGC-LEARNING OUTCOMES-BASED CURRICULUM

For Programmes under

**SCHOOL OF UNANI MEDICAL EDUCATION AND
RESEARCH (SUMER)**

JAMIA HAMDARD

(DEEMED TO BE UNIVERSITY)

Hamdard Nagar, New Delhi- 110062

CONTENTS

S.NO	Programme
1	Bachelor of Unani Medicine and Surgery (BUMS)
2	MD Unani Ilmul Advia (Pharmacology)
3	MD Unani Moalajat (Medicine)
4	MD Unani Tahaffuzi wa Samaji Tib (Preventive and Social Medicine)
5	Pre Tib
6	Diploma in Unani Pharmacy

**BACHELOR OF
UNANI MEDICINE
AND SURGERY
(BUMS)**

SCHOOL OF UNANI MEDICAL EDUCATION AND RESEARCH

Vision (School level):

- To become the institutional leader of Unani system of medicine in spheres of education, research and healthcare, nationally and internationally.
- Transformation and upgradation of Unani system of medicine as an evidence-based medicine through integration of modern science and technology with a concerted effort at the conservation of traditional knowledge.
- Significant and positive contribution of Unani medicine as means of safe and effective health care system.

Mission Statements (3 to 4) (School Level):

MS1: Committed to produce top-notch professionals who have a zeal for perpetual learning and are capable of performing well in diverse professional and cultural settings.

MS 2: To provide state of art facilities to conduct evidence based research in Unani Medicine for generation of new knowledge, SOP's and treatment modalities so as to make the Unani system universally accepted substantial system of medicine.

MS 3: To provide students with all the tools required to successfully take on the world, endeavor to instill in them a healthy cultural rootedness that combines the best of traditional values with modern and progressive sensibilities

MS 4: To collaborate with many reputed institutes of national and international importance for promotion and endorsement of the Unani system of Medicine as well as for strengthening and amplifying the academic relationships nationally as well as globally for mutual benefits.

Name of the Academic Program: BACHELOR OF UNANI MEDICINE AND SURGERY (BUMS)/ UG

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Academic Programme (BUMS), students will be able to:

QD-1 Demonstrate In-depth and profound knowledge of different branches of Unani system of medicine like Medicine, Pathology, Skin. IBT, Surgery. Gynecology and obstetrics, Pediatrics, TST, Kulliyat, Pharmacology, Anatomy and Physiology etc.

QD-2 Become proficient and expert Unani physician and surgeon.

QD-3 Demonstrate team work and leadership skills to inspire motivate and evaluate and solve interests of common causes of community health problems.

QD-4 Show convergent thinking for evaluation of the theories and practices of Unani system of medicine on modern scientific parameters and solving health related concerns

QD-5 Demonstrate the ability to be a devoted and committed lifelong learner through self paced and self directed learning, who respects ethnic inclusiveness with a zeal for research aimed at personal development and careers in public and private sectors.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	2	3	3	2
QD-2	3	3	3	3
QD-3	3	3	3	3
QD-4	3	3	3	3
QD-5	3	3	3	3

Write '3 'in the box for 'High-level'mapping, 2 for 'Medium-level'mapping, 1 for 'Low-level'mapping.

PROGRAM LEARNING OUTCOMES (PLOs) (12)

After completing this Course, the students should be able to:

PLO-1 Evaluate and assess the basic principles of Unani medicine.

PLO-2 Apply the knowledge of unani fundamentals in diagnosis and management of common health problems.

PLO-3 Develop the understanding of pathogenesis of diseases on the basis of Unani and modern concepts.

PLO-4 Develop holistic approach for treatment and management of diseases.

PLO-5 Practice preventive promotive, curative and rehabilitative care of diseases by applying different treatment modalities like dietotherapy, pharmacotherapy, Illaj bit tadbeer, Illaj bil yad and psychotherapy.

PLO-6 Demonstrate capability to work effectively in a team to manage different roles & responsibilities to deliver health care services and evaluate community health needs

PLO-7 Display excellent interpersonal and problem solving skills for solving various health concerns

PLO-8 Exhibit the passion for self learning and research using modern tools and techniques.

PLO-9 Display the understanding of other contemporary systems of medicine and show responsiveness to cultural diversity

PLO-10 Apply the principles of medical ethics and antiques in health care in civic affairs and at personal level.

PLO-11 Demonstrate the ability to communicate clearly with patients and peers.

PLO-12 Inculcate the passion for higher studies of medical science.

PROGRAM SPECIFIC OUTCOMES (PSOs)

(In case of specializations in each academic program, 2 to 4)

After completing this Course, the students should be able to

PSO-1 To understand the fundamental structure, functions and disease mechanism in human body.

PSO-2 To use the knowledge for making of diagnosis and management of diseases.

PSO-3 To make single and compound drug formulations and use them in treatment of various diseases.

PSO-4 To use different treatment modalities for disease management.

Mapping of Program Learning Outcomes (PLOs)

With Qualification Descriptors (QDs)

	QD-1	QD-2	QD-3	QD-4	QD-5
PLO-1	3	3	2	3	3
PLO-2	3	3	3	3	3
PLO-3	3	2	3	3	2
PLO-4	3	3	2	3	2

PLO-5	3	3	2	3	3
PLO-6	2	3	3	2	2
PLO-7	2	3	3	3	2
PLO-8	3	3	2	3	2
PLO-9	2	3	3	2	3
PLO-10	3	3	2	2	2
PLO-11	3	3	3	2	2
PLO-12	3	3	3	3	3
PSO 1	3	3	3	3	3
PSO 2	3	3	3	3	2
PSO 3	3	3	3	3	2
PSO 4	3	3	3	3	2

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

Course Code: BUM 101 (UNIUG-TB) Title of the Course: Tashreehul Badan

L-T-P: 200 L, 400 P

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO1 Understand the fundamental aspects of *Tashreeh ul badan* (Anatomy).

CLO2 Understand the detailed knowledge of *Satehi Tashreeh* (Surface Anatomy) along with *Jarahiyati* (Surgical) as well as *Ilaqi Tashreeh* (Applied Anatomy).

CLO3 Demonstrate understanding and role of *Tashreeh ul badan* (Anatomy) in *Jarahat* (Surgery).

CLO4 Demonstrate understanding and role of *Tashreeh ul badan* (Anatomy) in *Tashkhees-e-marz* (diagnosis of a disease) in *Matab* clinic.

CLO5 Understand and interpret radiological investigations more efficiently due to his/her detailed training in *Tashreeh e shuaee* (Radiological anatomy).

CLO6 Understand and read *Nabz* (pulse) more efficiently with the help of detailed training in *Ilm e urooqi* (Angiology).

CLO 7 Understand and perform *Ilaj bit tadbeer* (Regimenal therapy) procedures with his knowledge of *Ilmul ezaam* (Osteology), *Ilm e urooqi* (Angiology) as well as *Ilmul azlat* (Myology)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	P L O 3	PL O 4	PL O 5	PLO 6	PL O 7	P L O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
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CL O1	3	2	2	3	3	2	3	3	2	2	3	2	3	2	1	2
CL O2	3	2	2	3	3	2	3	3	2	2	2	2	3	2	1	2
CL O3	3	2	2	3	3	2	3	3	3	2	2	2	3	2	1	2
CL O4	3	2	2	3	3	2	3	3	3	2	2	2	3	3	1	3
CL O5	3	2	2	3	3	2	3	3	3	2	2	2	2	3	2	2
CL O6	3	2	2	3	3	2	3	3	2	2	2	2	2	2	2	2
CL O7	3	2	2	3	3	2	3	3	3	2	2	2	3	3	1	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.3

TarfeAsfal (Lower Limb)

- a. Izaam (Bones)
- b. Azlaat (Muscles)
- c. Mafasil (Joints)
- d. UrooqwaA'asab (Vessels and nerves)
- e. Hufrajat (Fossae):
 - i. MusallaseFakhzi (Femoral triangle)
 - ii. QanateMuqarribah (Adductor canal)
 - iii. Hufraemabiziyah (Popliteal fossa)

JUZE AMALI (PRACTICALS)

1. Demonstration of the parts of Body by dissection
2. Demonstration of bones and skeleton by models, charts and specimens.

3. Record book has to be maintained by the students and will be submitted at the time of Practical Examination duly signed by the concerned Teacher
4. Dissection to be supplemented with Audio-Visual aids and other modern techniques available, e.g. CD's etc

Note

- A) While teaching the various regions of the human body, the descriptions of bones, joints, muscles, blood vessels, nerves etc. shall be brief. However, emphasis shall be given on the clinical, applied and radiological aspects of anatomy.
- B) Monthly seminar is to be conducted essentially to develop research attitude among the students

Detailed Syllabus

Paper A

Unit 1: General Anatomy 20

Unit 2: Head and Neck region 20

Unit 3: Thorax and Upper and Upper Limb 20

Unit 4: Abdomen and Viscerae Lower extremity 20

Unit 5: Lower extremity 20

Tashreeh ulBadan/Anatomy TOTAL HOUR- 100

PAPER I

TashreehulBadan (Anatomy)

PAPER- I

1. **TashreehulBadankata'aruf (Introduction of Anatomy):**
 - a. NizameJismanikamukhtasar ta' aruf (A brief description of all systems of the body).
 - b. Tashreehiwaz'awaMuta'alliqaistilahat (Anatomical position and related terminologies)
 - c. Jildaurskezawaid (Skin and its appendages)
 - d. Lafafesatahiyawaghaairah (Superficial and deep Fasciae)
 - e. Autar, RibatataurAkyasezulaliya (Tendon, Ligaments & Bursae)
 - f. Izaam (Bones): Aqsaam, af'aalwata'azzum (Types, functions and ossification)
 - g. Azlaat(Muscles): Aqsaamwaaf'aal (Types and functions)
 - h. Mafasil (Joints): Aqsaamwaharakat (Types and movements)

**2. Ilmuljaneen (Embryology): IjmaliTa'arufauritlaqiahmiyat
(Introduction and applied importance)**

3. IbtidaellmunNasl (Elementary Genetics)

RaaswaUnq (Head and Neck)

A. Raas (Head)

- a. Izaamraaswawaj'h (Cranial and facial bones)
- b. Farwaturraas (Scalp)
- c. Azlaat (Muscles)
- d. UrooqwaAsaab (Vessels and nerves)
- e. A'azaeNizame Hazm (Digestive organs): Jaufe fam, Lissa, AsnaanwaHalaq (Oral cavity, gums, teeth and pharynx)
- f. A'azaeTanaffus (Respiratory organs): Anaf, jaufeanfwaKhalayehawaiyah (Nose, nasal cavity and Paranasal sinuses)
- g. Uzn (Ear)
- h. MashmoolateMihjar (Contents of Orbit): Aj'faan (Eyelids)' Aalatedam'a (Lacrimal apparatus) and Muqlatul Ain (Eye ball)
 1. GhudadeLu'abiya (Salivary glands)

B. Unq (Neck)

- a. MusallasateUnq (Triangles of the Neck)
- b. AzlaateUnq (Muscles of the Neck)
- c. Urooqwaa'asab (Vessels and nerves)
- d. HanjarahwaQasbatur'riyah (Larynx and Trachea)
- e. Mari (Oesophagus)
- f. RaaswaUnqkeGhudadeLymphawiyah (Lymph nodes of Head and neck)
- g. FuqrataUnq (Cervical Vertebrae)
- h. GhudadeDarqiyahwaJaruddarqiyah (Thyroid and parathyroid glands)

c. NizameA'asabwaDimagh (Nervous system and Brain)

- a. Dimagh (Brain)
- b. Nukha'a (Spinal Cord)
- c. A'asabeNukhawaDimaghi (Cranial and Spinal nerves)

D. Sadr (Thorax)

- a. Jaufe Sadr (Thoracic Cavity)
- b. Azla'a, AzmulQaswafuqraatesadr (Ribs, Sternum and Thoracic Vertebrae)
- c. Azlaatesadr (Muscles of the Thorax)
- d. Ghishaurriyahwariyatain (Pleura and Lungs)
- e. Hijabemunassifussadrwamashmoolat (Mediastinum & its contents)
- f. UrooqwaA'asabaumajraesadr (Vessels, Nerves and Thoracic duct)
- g. GhilafulqalbwaQalb (pericardium and Heart)
- h. HijabeHajiz (Diaphragm)
- i. Saddyain : Mammary Glands

E. Tarfe A'ala (Upper Limb)

- a. Izam (Bones)
- b. Azlaat (Muscles)
- c. Mafasil (Joints)
- d. Ibtwahufraemirfaqiyah (Axilla and Cubital fossa)
- e. UrooqwaA'asab (Vessels and nerves)

PAPER- II	Total Hours 100
Unit 1 <i>Batan</i> and its Visceras (Abdomen and its visceras)	40
Unit II <i>A'Anaa a Eijan</i> Perineum and Pelvis	20
Unit III <i>Atraf e Asfal</i> Lower Extremities	40

Batan (Abdomen)

- a. HisaseBatan (Abdominal regions)
- b. Deeware batan (Abdominal wall)
- c. Bareetoon (Peritoneum)

- d. Ah'shaebatan (Abdominal viscera)
- e. Fuqraatequtn (Lumbar vertebrae)
- f. UrooqwaA'asab (Vessels and nerves)

A'anawaejan (Pelvis and perineum)

- a. Azmeajuz wa- us'us (Sacrum and coccyx)
- b. Azlaatea'ana (Muscles of pelvis)
- c. Ah'shaeAana (Pelvic viscera)
- d. UrooqwaA'asab (Vessels and Nerves)

TarfeAsfal (Lower Limb)

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Note

- A) While teaching the various regions of the human body, the descriptions of bones, joints, muscles, blood vessels, nerves etc. shall be brief. However, emphasis shall be given on the clinical, applied and radiological aspects of anatomy.

B) Monthly seminar is to be conducted essentially to develop research attitude among the students.

Teaching-Learning Strategies in brief (4 to 5 sentences)

Anatomy is the most basic structural orientation of knowing the gross structure and relativity of one organ with other in medical sciences. The study is to enable the student to have a perfect level of understanding the body in normal state by demonstration, discussion, psychomotor involvement of student.

To enable the learner to relate himself with any kind of deviation in structure and understand the pathological condition.

To get acquainted with the possible remedial intervention either by clinical or applied anatomical intervention.

Assessment methods and weightages in brief (4 to 5 sentences)

This is based on the guidelines of the NCISM, Govt of India

Paper A 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)

Paper B 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)

In theory examination term courses will be assessed in sessional exams by;

Written exams, Assignments, Presentations etc

Practical 100 + 50 Marks Sessional 1,2 and 3 =20 For Elective Subject marks in best of two and 30 for Elective Subject

Term exams for practical will be based on Viva-voce of the term course, practical record maintenance ,group discussions , Preparation of Models, Charts and specimen identification cadaver dissection(subject to availability) etc

Reference Books:

<i>Books</i>	<i>Author</i>	<i>Edition Publisher and Year</i>
<i>Al-Qanoon fit tib (Jildawwal)</i>	Ibn e sina	Ed 3 rd CCRUM Publication, 2010
<i>TortoraA text book of Human Anatomy G Tortora and Derrickson</i>		15 th Edition, Wiley India Pvt Limited 2016
<i>Tashreeh e kabeer (Part-1)</i>	HkmMohdKabeer	1 st Edition Daftar al MAsehQarolBagh,

Uddin	Delhi 1923
<i>Ilmulezaam by Alauddin Khan</i>	1 and 2 Chaman Publishers 1994
<i>Tashreeh e kabeer (Part-2)HkmMohdKabeeruddin</i>	1st Edition Daftar al MasehQarolBagh, Delhi 1923
B D ChourasiaHuman Anatomy	8th Edition CBS Publishers Delhi 2019
Gray's Anatomy Henry Gray et al	42nd Edition Elsevier Publishers London 2019
Snell's clinical Anatomy <u>Dr. Lawrence E. Weneski</u>	10th Edition Lippincott Williams Publisher 2018
Inderbir Singh Textbook of Anatomy V Subhadra et al	7th Edition JP Brothers Medical Publishers Delhi 2022
Practical Manual of AnatomySmitaKakkar	4th Edition JP Brothers Medical Publishers Delhi 2022
Cunningham's Dissector 1, 2 and 3Romannes et all	18th Edition Oxford Medical Publishers 2018

Course Code:(BUM-102) UNIUG-MZ. Title of the Course: MANAFEUL AZA

L-T-P: L200, P400 hours

(L=Lecture hours= 200, T=Tutorial hours=100, P=Practical hours =300)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1: Understanding the fundamental aspects of Manafeul Aza (Physiology)

- CLO-2: Demonstrate understanding the role of Manafeul Aza (physiology) in Tashkhees-e-Marz (Diagnosis of diseases).
- CLO-3: Apply the knowledge of Manafeul Aza in understanding the pathophysiology of various diseases in medicine.
- CLO-4: Get to know the basics of Biochemistry relevant to human physiology.
- CLO-5: Demonstrate understanding and the role of Manafeul Aza (Physiology) in Ilmul Advia (Pharmacology), Ilaj bit Tadbeer and Ilaj bil Yad.
- CLO-6: Get to know about knowledge of vitamins in details and its doses and deficiency for the daily health care in the community.
- CLO-7: Teaching to the students about the applied physiology to know the normal and abnormal changes in biochemistry for the problem solving skills for various health concern.
- CLO-8: Giving the knowledge to the students on various equipments like clinical thermometer, sphygmomanometer, stethoscope and ECG to learn abnormal changes in the various system of the body and helps the students for self-learning various signs on the body.
- CLO-9: We are also imparting the knowledge to students on various physiological changes from Sin-e-Kahulat to Sin-e-Shekhukhat.
- CLO-10: During the teaching period we are giving the knowledge of Tibbi Akhlaqiyat to the students for dealing the patient in clinical field community.
- CLO-11: We explain to student before taking the Blood Pressure, temperature, respiratory rate and ECG and listening the different sound in the body how to communicate with patient.
- CLO-12: We also focus to the students that after learning of physiology you can go for higher education like, M.D. and Ph.D.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CLO1	3	3	3	3	3	3	3	3	3	2	2	2	3	3	1	3
CLO2	3	3	3	3	3	3	3	3	3	3	2	2	3	2	1	2
CLO3	3	3	3	3	2	3	3	3	3	2	2	2	3	2	2	2
CLO4	3	3	3	3	3	2	3	3	3	2	2	2	2	2	1	2
CLO5	3	3	2	3	3	3	3	2	3	3	2	2	3	2	1	1
CLO6	3	3	3	3	3	3	3	3	3	2	2	2	3	2	2	2
CLO7	3	2	3	3	3	3	3	3	3	2	2	2	2	2	2	2

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Detailed Syllabus

MANAFEULAZA (Physiology) SYLLABUS

(Teaching 110 Hours)

(Per Unit = 22 Hours)

PAPER-I

(General Physiology and Biochemistry)

THEORY

Unit 1: Cytology and Histology:

(22 HOURS)

I: Cytology: Brief discussion and introduction of cytology

Ii: Tissue: Definition, types, distribution, and function of tissues.

QHULIA:

Qhulia ki khurd beeni sakht-o-Afaal, Takhseem-e-Qhulia

INSAJA:

Tareef, Aqsaam, khurd beeni sakht ka phailao-wa-Afaal, Nasseje Bushra,
Naseeje Waasil, Nassje Azlee wa Naseeje Asabi

Unit 2: BLOOD & HAEMOPOIETIC SYSTEM:

(22 HOURS)

Definition of Blood, constituents, functions, viscosity, volume

BLOOD PLASMA: Constituents, Plasma Proteins and their functions

RBC: Structure, composition, formation, development & fate, total count, method of estimation & physiological variations

KHOON:

Khoon ki tareef, ajza, afaal, lazoojat aur hajam, Mahiyat-ud-dum, ajza, mavaade lahamiya, afaal

KURRIYAT-E-HAMRA:

Saqt, ajza-e-tarkeebi, paidaish aur numu, anjam, majmooyee taadaat, miqdaar ki takhmeen ke tareeqe aur unke feliyati iqhtilaaf

HAEMOGLOBIN: Composition, varieties, properties, method of estimation and functions

WBC: Types, formation, structure, functions, & Differential count

HAMRATUDDAM:

Ajza-e-tarkeeb, aqsaam, khwaas, miqdaar ki takhmeen ke tareeqe

AFAAL KURRIYAT-E-BAIZIYA:

Aqsaam, paidaish, afaal aur inke baahami tanasub

PLATELETS:

Structure, formation & functions,

Coagulation of Blood:

Definition, Coagulation factors, Bleeding time, Clotting time and their estimation

Blood Groups:

Blood Transfusion & Blood Banks

Unit 3: Vitamins & Metabolism:

(22 HOURS)

Definition, types, daily requirement and functions Vitamin ki tareef, aqsaam, miqdar khurak aur afaal

METABOLISM:

Introduction to Metabolism, Metabolism of Carbohydrate, Metabolism of Lipids, Metabolism of amino acids, Mineral and Water metabolism.

ISTEHALA:

Istehala ki tareef, Nashasta ka istehala, Shamiyat ka istehala, Humooze Shorain ka istehala Madaniyat aur paani ka istehala

Unit 4: CIRCULATORY SYSTEM:

(22 HOURS)

Introduction, Valves of Heart and their actions, Special Junctional Tissues, Properties of Cardiac Muscles, Cardiac cycle, heart block, Nerves of the heart, cardiac centre & its function, Electro-Cardiograph, Blood Pressure and its physiological control.

NIZAAM-E-DAURAN-E-KHOON:

Tareef, Samamaat-e-qalb aur inke afaal, Qalb ke makhsoos itsaali ansaja, Azla-e-qalb ki khusoosiyat, Daura-e-qalbi, aswaat-e-qalb, suqoot-e-qalb, Aasaab-e-qalb, 14mraz14-e-qalb aur iske afaal, Barqi qalb nigari, Fisharruddum aur iske feliyati avamil

Unit 5 .LYMPHATIC & RETICULO-ENDOTHELIAL SYSTEM:

(22 HOURS)

Formation and composition of lymph, Lymphatic channels, Lymphatic drainage, Lymph Glands Reticulo-endothelial system, its functions, spleen & its functions

NIZAM-E-UROOO-E-LIMFAVIA AUR SHABKI-O-BASHREE BAATINI:

Rutubat-e-limfavia ki paidaish aur tarkeeb, rutubat-e-limfavia ka dauran, ghudood-e-limfavia, Nizam-e-shabkiya muhtaj ki tamheed aur afaal, Tihaal aur iske afaal.

Paper II

SYSTEMIC PHYSIOLOGY

(Teaching Hours 115)

(Per Unit = 23 Hours)

THEORY

Unit 1: DIGESTIVE SYSTEM: (23 HOURS)

Introduction of digestive system, Histological structure of salivary glands & secretion of Saliva. Composition, secretion and function of Gastric juice, Pancreatic juice, Succus entericus and Bile. Movements of Alimentary canal and their functions, Formation of Faeces and Defecation. Structure and functions of Liver, Digestion of carbohydrate, protein and lipids, Absorption of water.

NIZAM-E-HAZM:

Tamheed-e-nizam-e-hazm, Khurdbeeni sakht of ghudood-e-Luabiya, Luab-e-dahan ki tarkeeb, iski tarssho aur afaal, rutubat-e-maaddi, rutubat-e-banqras, rutubat-e-mayvi, aur rutubat-e- safravi ki tarkeeb, tarassho aur afaal, Majra-e-ghizai ke harkat aur unke afaal ,Fuzla ki banavat- o-Iqhraj, Jigar ki saaqht-o-afaal, Hazme-Nishashta, Shorain and Shaham, Paani ka injezab.

Unit 2: RESPIRATORY SYSTEM: (23 HOURS)

Introduction of Respiratory system/organs, histological structure, Respiratory muscles & functions of respiratory system/organs, Transport of Oxygen & Carbon dioxide, Gaseous exchange in lungs and tissues, Centres of respiration, Artificial respiration and its methods, Pulmonary Volume, Pulmonary Capacities, Dyspnoea, Anoxia, Apnoea, Hypercapnia, Physiological effect of High altitude & under water.

NIZAM-E-TANAFUSS:

Mukhtalif tanaffussi aaza ki tamheed, khurdbeeni sakht, Uzlaat-e-tanaffuss aur unke afaal, Oxygen aur Carbon di oxide ki muntaqheeli, Riya aur insaja may gason ka tabadila, Tanaffuss ke marakiz, Masnooi tanaffuss aur inke mukhtalif tareekhe, Jasamat-e-reviya, Waqaat-e-reviya, Usre teanaffuss, Qillat-e-baad, Dushwaar-e-tanaffuss, Izdiyad-e-tanaffuss, Sat-he martafa aur gehre paani ke feliyati asraat.

Unit 3: EXCRETORY SYSTEM & SKIN: (23 HOURS)

Introduction to the organs of excretion

KIDNEYS:

Structure and functions, Nephron, functions of glomerulus, Formation, composition & volume of urine, Normal and Abnormal constituents of Urine ,Reaction and Specific Gravity of Urine, Role of Kidney in maintenance of body temperature & Acid base balance, Micturation- definition and mechanism.

SKIN:

Structure and functions of skin [Integument], Sweat, regulation of body temperature, abnormal and sub-normal temperature.

NIZAM-E-IOHRAJ-E-BOWL:

Aaza-e-bowl ka taaruf

KULLIYA:

Sakht aur afaal ,Kulvi ikai, Uqda-e-Urooq ke afaal, bowl ki paidaish, tarkeeb aur miqhdar,Bowl ke tabayyi aur ghair tabayyi ajza,Bowl ka raddo amal aur wazn-e-makhsoos, Hararat-e-badaniya ko aetadal par rakhne ke liye gurdon ka amal, tarsh-e-qhalvi tavazun, Iqhraj- e-bowl ki tareef aur meekaniya

JILD:

Jild ki sakht aur afaal, Paseena, Hararat-e-badaniya ka tavazun, ghair tabiyyee hararat aur qillat- e-hararat

Unit 4: NERVOUS SYSTEM [IN BRIEF] & SENSORY ORGAN: (23 HOURS)

Nerve structure, functional aspects of nerves, fore brain, hind brain, meninges, mid brain, medulla oblongata, spinal cord, cerebro –spinal fluid and its function, Function of central nervous system.

NIZAM-E-AASAB [Ikhtesaar ke saat]:

Aasab ki sakht aur afaal-e-muqhaddum wa muakkkhir-e-dimag, butoon-e-dimag, ausat dimag, Raas un nukha, nukha, rutubat-e-dimaghiya aur nukhaiya, Aasabi 16mraz16 ke afaal.

SENSORY ORGANS:

Physiology of Taste, Smell, Hearing Vision and touch

NIZAAM-E-SHIRKE AFAAL:

Mechania - Zaika, Sha'ama, Sama'at, basarat aur lams

Unit 5: ENDOCRINE SYSTEM & MALE & FEMALE REPRODUCTIVE SYSTEM (23 HOURS)

General description of Endocrine glands, Secretions and functions of Pituitary, Thyroid, Para- thyroid, Thymus, Supra-renal glands, Pancreas, Ovaries and Testes.

GHUDDOOD-E-GHAIR NAAOILA:

Ghuddood-e-ghair naaqila ka aam bayan, Ghuddood-e-Nikhamiya, darqiya, Jawul darqiya, temusiya, fauqhul kulliya, banqras, khusyat-ur-raham and Khusiya ke ifrazaat aur afaal.

Male and Female Reproductive System:

Male reproductive system:

Male reproductive organs, puberty, spermatogenesis, composition of semen, prostate glands and its function.

Female reproductive System:

Menstruation, ovulation, fertilization and implantation.

Nizame tauleed Mardana wa Zanana :

Nizam-e-Tauleed Mardana:

Aza-e-Tauleed Mardana, Buloogat, Haiwane manwiya kay irtiqaee madarij, Tarkeeb-e-Mani, guda-e-Mazi aur uskeafaal.

Nizam-e-Tauleed Zanana:

Daura-e-Tams, Amal-e Tabaveez, Baar-aawari and Isteqrara Hamal

PRACTICAL

(Practical Hours= 200)

PRACTICALS [JUZ-E-AMALI]

Unit 1: **Histological studies of various organs** (60 Hours)

Mukhtalif aaza ki khurdbeeni saakht ka mutala

Unit 2: **Haematology:** Estimation of Haemoglobin, estimation of Erythrocyte (40 Hours)

Sedimentation rate [ESR], estimation of Clotting time, estimation of Bleeding time, Total Leukocyte count, Differential Leukocyte count, total RBCs count. Hamratuddam ki

takhmeen ke terekhe, kurriyat-e-Hamra ki tahanasheeni ki takhmeen, Waqt-e-injamamuddum aur waqt-e-jiryannuddum ki taqmeen ke tareekhe, kurriyat-e-abyaz ka majmooyi shumar, kurriyat-e-abyaz ka tafreekhi shumar.

Unit 3: **Biochemistry:** Estimation of Blood Sugar & Blood Grouping. **(20 Hours)**

Hayatiyati keemiya: Khoon me shakkar-e-angoori ki taqmeen, khoon ki girohbandi

Unit 4: **Urology:** Estimation of Sugar, Albumin, Acetone, Bile Salts, **(40 Hours)**

Bile Pigments in urine

Mutala-e-bowl: Kharoore me shakkar-e-angoori, Mawaad-e-lahmi, bezwi, acetone, namakiyat, safravi, alwaan-e-safravi kaimtihaan-o-taqmeen

Unit 5: **Experimental observation** of E.C.G., E.E.G. machine, Spirometry, Uses of **(40 Hours)**

Instruments, Sphygmomanometer and clinical thermometer.

Tajrubaat: Mushahida aalat barqhi qhalb nigari, aala-e-paimaish afaal par tajrubaat aur unka mushahida. Aala-e-fisharruddum ke istemal katareekha.

Departmental Symposium on various important topics. Shoba-e-Manafe ul aza me muqhtaleef unwaanoan par symposiums ka ehtamaam-o- Inaqaad

***Note:** All practicals should be documented.

Reference Books: Textbooks of Human Physiology

1. Authors (year), *Title of the Book*, Edition, Publishers, Place of Publication, Page Nos.

S. N	Author	Title of the Books	Edition	Publisher	Place of Publication	Page Nos.
1	Dr. Chandi Charan Chatterjee, B.Sc. MD (Calcutta), Department of Physiology Medical College, Calcutta, India (2020)	Human Physiology Volume-I (Theory)	13 th	CBS, Publisher & Distributors Pvt. Ltd. 4819/XI, Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110002,	New Delhi	588

				India		
2	Dr. Chandi Charan Chatterjee, B.Sc. MD (Calcutta), Department of Physiology Medical College, Calcutta, India (2020)	Human Physiology Volume-II (Theory)	13 th	CBS, Publisher & Distributors Pvt. Ltd. 4819/XI, Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110002, India	New Delhi	234
3	K Semulingam Prerna Semulingam (2021)	Essential of Medical Physiology	8 th	Jaypee Brothers Medical Publishers (P) Ltd. 4636/24, Ansari Road Daryaganj, New Delhi-110002, India	New Delhi	1109
4	C. Guyton, MD, Prof and department of Physiology and Biophysics, University of Mississippi, school of Medicine (2020)	Text Book of Medical Physiology	14 th	W.B. Saunders Company London	London	1044
5	Prof. A.K. Jain MD. Department of Physiology Maulana Azad Medical College, New Delhi (2017)	Text Book of Physiology, Volume-I	7 th	Avichal Publishing company Industrial area, Kala AMB-173030, District Sirmour (HP) Delhi Office: 30 Naiwala Karol Bagh, New Delhi-110005	New Delhi	550

7	Prof. A.K. Jain MD. Department of Physiology Maulana Azad Medical College, New Delhi (2017)	Text Book of Physiology , Volume- II	7 th	Avichal Publishing company Industrial area, Kala AMB-173030, District Sirmour (HP) Delhi Office: 30 Naiwala Karol Bagh, New Delhi- 110005	New Delhi	572
8	Hakim Khalid Zama Khan (1996)	Af-al-ul Aza Volume-I	1 st	Ejaz Publishing House 2861, Kuncha Chalan, Darya Ganj New Delhi-110002	New Delhi	252
9	Hakim Khalid Zama Khan (2002)	Af-al-ul Aza Volume-II	2 nd	Ejaz Publishing House 2861, Kuncha Chalan, Darya Ganj New Delhi-110002	New Delhi	304

Teaching-Learning Strategies in brief (4 to 5 sentences)

The teaching-learning process must constantly overcome the barriers imposed by rapid scientific and technological advances, as well as changes in the profiles of students and access to information. This study intended to analyze the perceptions of students and professors of medical courses of the teaching-learning strategies used in physiology as well as the factors that influence or hinder the learning of this discipline. Questionnaires were analyzed from 50 students. The teaching strategies most used by physiology teachers coincided with the classroom activities that students consider to have the greatest contribution to their learning. It was also evidenced that teachers' didactic is considered as a very influencing factor for the students during their learning process, whereas the teachers pointed out daily pedagogical practice as the most relevant factor in the development of their skills within the classroom.

Assessment methods and weightages in brief (4 to 5 sentences)

1. Paper-A 100 Marks Theory (breakup Sessional I, II and III= 25 Marks in best of two)
2. Paper-B 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)
3. Theory examination paper A and B 75 Marks will be held in Annual Examination at the end of BUMS 1st year course.
4. In theory examination term courses will be assessed in sessional exams by written exams, assignments, presentations etc.
5. Practical 100 Marks Sessional 1,2 and 3 =25 marks in best of two to be counted
Term exams for practical will be based on Viva-voce of the term course, practice

Course Code: UNIUG-KUT (BUM103)

Title of the Course: Kulliyat Umoore Tabiya

L-T-P: 70+140

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1 Explain Unani Medicine as the branch of knowledge in which the functions of human body are studied in order to preserve the health and cure the disease.(Understand)

CLO-2 Describe the role of Ṭabī‘at in health & disease.(Understand)

CLO-3 Discuss the concept of Arkan and its significance.(Understand)

CLO-4 Discuss the concept of Mizaj, and its clinical application.(Understand & Apply)

CLO-5 **Demonstrate the concept of Akhlat and its importance with respect to the diagnosis and treatment.**(Understand and apply)

CLO-6 Describe and demonstrate the classification of the Aza with respect to their origin, formation, distinction and functions.(Understand and Analyze)

CLO-7 Interpret the concept of Arwah and their role in maintenance of health and normal bodily functions. (Understand & Evaluate)

CLO-8 Discuss the concept of Quwa and Afal with their classifications.(Understand and apply)

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	2	2	1	2	2	2	1	1	3	3	2	1	2
CLO 2	3	3	3	2	2	1	2	2	2	1	1	3	3	2	1	2
CLO 3	3	3	3	2	2	1	2	2	2	1	1	3	3	2	1	1
CLO 4	3	3	3	2	2	1	2	2	2	1	1	3	2	1	1	2
CLO 5	3	3	3	2	2	1	2	2	2	1	1	3	3	2	1	1
CLO 6	3	3	3	2	2	1	2	2	2	1	1	3	3	2	1	1
CLO 7	3	3	3	2	2	1	2	2	2	1	1	3	2	2	1	2
CLO 8	3	3	3	2	2	1	2	2	2	1	1	3	2	2	1	1

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

1. Mabhas-e-Aam (General Discussion)

(10 hours)

1. Ilme Tib ki Tareef (Definition of Tibb)
2. Tib ke mozu aur garz-o- ghayat (Subject and objectives of Tibb)
3. Tibb ki darjabandi imsal ke sath (Classification of Tibb with suitable examples)
4. Umoore Tabeiyah ki Tareef aur ahmiyat (Definition and importance of Umoor-e-Tabiyah)
Tabiyat ki tareef aur ahmiyat (Definition of Tabeiya't and its importance)
5. Ala-e Tabeiya't wa Mana'at (Tools of Physis and Immunity)
6. Umoore Tabeiyah ka mafhoom tareef, ta'dad wa ahmiyat (Meanings, definition, number and importance of Umoore Tabiyah)
7. Asbab ka bayan (Description of causes)

2. Arkaan (Anasir)

(10 hours)

1. Arkan (Anasir) ki tareef (Definition of Arkan or Anasir)
2. Arkan ki Ta'dad aur anasir Arba ka Nazaria (Number of Arkaan and Concept of Arkan-e-Arba).
3. Anasir ka tabaee muqam aur agraz –wo- maqasid (Physical position, purpose and significance of Arkan-e-Arba)
4. Anasir ka jadeed nazariya (Modern concept of Elements)
5. Jadeed nazariya ke mutabiq anasir-e-insaniah ki taqseem aur sehat wa maraz mein inki ahmiyat (Classification of Human element and their role in Health and Disease)

3. Mizaj

(10 hours)

1. Mizaj ki tareef (Definition of Temperament)
2. Imtizaj-e-Sada, Imtizaj-e-Haqeeqi
3. Mizaj ki taqseem (Classification of Temperament)
4. Taqseem-e-Mizaje Mutadil (Classification of Equable or Balanced temperament)
5. Taqseem Mizaje Ghair Mutadil or Sue Mizaj (Classification of Unequable or Imbalanced temperament), Sue mizaj sada, sue mizaj maddi
6. Hararate Ghariziyah (Innate or Intrinsic heat)
7. Hararate ghariba Harat Muqassira
8. Mizaje Insani (Human temperament) Shanakhte Mizaje Insani (Identification of Human temperament)- Ajnas-e-Ashra
9. Mizaje Aaza (Aza-Mufrada, Aza Murakkaba)
10. Mizaje Asnan (Temperament of different ages) Mizaj-e-Asnaf
11. Mizaje Aqaleem (Human Temperament according different regions of Earth)
12. Ilaj-wo Moaleja mein Mizaj ki Ahmiyat aur Mizaj-e-Adviyah (Importance of the Mizaj with respects to drugs and therapeutics)

4.Akh'lat

(10 hours)

1. Akh'lat Ki tareef (Definition of Humours)
2. Akhlate Arba' ka Ijmali bayan wo-Bahas (Description and discussion of Akhlate Arba)
3. Description of Dam (Blood) with classification and functions
4. Description of Balgham (Phelgm) with classification and functions
5. Description of Saf'ra (Bile) with classification and functions
6. Description of Sauda (Black Bile) with classification and functions
7. Basis of Akh'late Arba (Four Humours) Arbiyat Akhlat ke Dalayil
8. Tawleed Akhlaat (Production of Ak'hlat)
9. Ratoobate-Oola-wo- Sania

10. Huzume Arba' ka Ijmali bayan (Brief description of Four Digestions)

5.A'za

(10 hours)

1. General description of A'za (Organs) and their classification
2. Definition of A'zae Mufradah (Simple Organs).
3. Classification of A'zae Mufradah
4. Description and functions of the following organs:
 - a) Azm (Bone)
 - b) Ghuzruf (Cartilage)
 - c) Ribat (Ligaments)
 - d) Wat'r (Tendon)
 - e) Asab (Nerve)
 - f) Ghisha (Membrane)
 - g) Laham (Flesh)
 - h) Shaham (Fat)
 - i) Shiryan (Arteries) and vareed (Veins)
5. Theory of Abu Sahl M seehi about A'zae Mufradah (Simple Organs)
6. Inclusion of Sha'r (Hair), Zufu (Nail) and Mukh (Marrow) in A 'zae Mufradah
7. Definition of A 'zae Murakkaba (Compound Organs) with their classification
8. Definition of A 'zae Raisah (Vital Organs) and their classification
9. Definition of A 'zaeKhadimah (Subordinate Organs)
10. Definition of 'Uzue Mu'ti (Donor Organ) and their classification
11. Definition of 'Uzue Qabil (Recipient Organ) and their classification

6.Arwah

(10 hours)

1. Definition of Ruh with its various interpretations and classification
2. Concept of Ruh (Pneuma) according to different Unani Scholars
3. Ruh ke wazaif wa masalik (Functions of Ruh and its routes)
4. Ruh and Tarwih (Oxygenation)
5. Concentration of Ruh at certain location

7.Quwa

(10 hours)

1. Definition of Quwa (Powers or Faculties) with classification and functions
2. Quwwate Nafsaniyah (Psychic or Mental Faculty)
3. Quwwate Muharrikah (Motor Faculty)
4. Quwwate Mudrikah (Faculty of Perception)
5. Hawase Khamsah Zahirah (Five Special Senses)

6. Quwwate Basirah (Power of Vision)
7. Quwwate Sami'ah (Power of Hearing)
8. Quwwate Shammah (Power of Smell)
9. Quwwate Za'iqah (Power of Taste)
10. Quwwate Lamisah (Power of Tactile Sensation)
11. Hawase Khamsah Batinah (Intellectual Senses)
12. Hisse Mushtarak (Power of Composite Senses)
13. Quwwate Mutakhayyalah (power of reasoning and imagination)
14. Quwwate Hafizah (Power of Memory)
15. Quwwate Mutasarrifah (Power of modification)
16. Quwwate Waahimah (Power of apprehension)
17. Quwwate Haywaniya (Vital Faculties)
18. Quwwate Fa'ilah and Munfa'ilah (Active and Passive Faculty)
19. Advantages of Inqibaze Qalb wa Inbisate Qalb (Systolic and Diastolic movements of the Heart)
20. Brief description of Daurane Khoon (Blood Circulation)
21. Definition and Classification of Quwwate Tabeiya (Physical Power)
22. Definition and functions of Quwwate Ghaziah
23. Definition and functions of Quwwate Namiah (Power of Growth)
24. Detailed description of Sharaete Taghziah (Conditions of nutrition)
25. Functional stages of Quwwate Ghaziah (Quwat-e-Gazia ke madraj amal)
26. Definition and functions of Quwwate Mutaghayyarah (Power of transformation)
27. Detailed description of Taghayyurate Ghiza (Metabolism of Nutrients)
28. Definition and functions of Quwae Tabeiya Khadimah (Subordinate of Physical faculty)
29. Definition and functions of Quwae Jazibah, Masikah, Hazimah wa Dafiah (Powers of absorption, retention, digestion and excretion)
30. Detailed description of Huzume Arba' (Four Digestions)
31. Description of Haz'me Me'di (The Elementary Digestion)
32. Description of Haz'me Kabidi (The Hepatic Digestion)
33. Description of Haz'me Uruqi (Vascular Digestion)
34. Description of Haz'me Uzwi (Cellular Digestion)
35. Definition and classification of Quwwate Tanasuliyah (Power of reproduction)
36. Definition and functions of Quwwate Muwallidah (Generative Power)
37. Definition and functions of Quwwate Musawwirah (Moulding Power)

38. Definition and classification of Af'aal (Functions) according to Quwa (Powers)

PRACTICAL

(20 hours)

JUZE AMALI (PRACTICALS)

Arkan

- i) Anasir Arba ke Tabae muqam ka mushahida bazari-e Khaka (Graphs)
- ii) Calourimeter ke zariya keefiyat arba ka mushahida
- iii) Periodic Table ke zariya Arkan (Elements) ka Mushida aur arkan ki Darja Bandi
- iv) Anasir Insaniya ki darja bandi aur Khaka

Mizaj

- i) Ajnas Ashra ke zariye Mijaz-e Insani ki taskhees aur record book par iska Indiraj
- ii) Aqaleem ka Mushida ba zariye Globe
- iii) Qadeem wa jaded aqleemi takseem ke khake

Akhlaat

- i) Fasd ke Zairye Akhlaat Arba ka Amlī Mushida
- ii) Ghalba Akhlaat ki Alamaat ka mushahida Sehat wa Mariz ki halat mein

Aza

- i) Aza Mufrada wa Aza Murakaba ka Aini Mushaida
- ii) Aza Mufrada ka Khurdbeeni Mushahida
- iii) Record Book mein Aza ke Af'al aur Khakon ka Indaraj

Arwah

- i) Arwah ka takseemi khaka

Quwa

- i) Quwa ka Takseemi Khaka

Afaal

- i) Afaal ka Takseemi Khaka

Reference Books:

S.No:	Name of book	Author	Publisher	Year
1.	Kaamil-as- Sina'ah	Ali Ibn Abbas Majoosi	Idara Kitab-ul-Shifa. New Delhi,	2010
2.	Introduction to Umūr Tabī'iyā	Prof. Syed Ishtiyāq Ahmad	Saini Printers, Delhi	1980
3.	Firdaus-al-Hikmat fil Tibb	Ali ibn Rabban	Idara, Kitab-ul-Shifa.	2010

		Tabri	New Delhi	
4.	Kitabul Murshid (Urdu translation)	Raziul Islam Nadwi,	Anjuman Taraqqi Urdu Bureau. New Delhi.	2000
5.	Kulliyat-e-Asri	Prof. Syed Ishtiyag Ahmad	New Public Press, Delhi	1983
6.	Kulliyat-e-Qanoon	Allama Mohammad Kabiruddin	Ajaz Publishing House. Darya Ganj, New Delhi.	2006
7.	Kulliyat-e-Nafisi	Allama Mohammad Kabiruddin	Idara Kitab-ul-Shifa. New Delhi,	1934
8.	Ifada-e- Kabir	Allama Mohammad Kabiruddin	NCPUL, HRD Ministry, Govt. of India	2001
9.	Zakheera Khwarazm Shahi	Ismail Jurjani	Aijaz Publishing House. Darya Ganj, New Delhi	2010
10.	Al-Qanoon fil Tibb	Ibn Sina	Aijaz Publishing House. Darya Ganj, New Delhi	2010
11.	Kitab- al-Mansoori	Hakim Mohammad Zakariya Razi	CCRUM, New Delhi.	1991
12.	Kitāb Al Murshid (The Guide) (English translation)	Hakim Wasim Ahmad	Markazi Publications, Jamia Nagar, Okhla, New Delhi	2021

13.	Usool-e-Tib	Syed Kamaluddin Husain Hamdani	NCPUL, New Delhi	2018
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Teaching-Learning Strategies in brief (4 to 5 sentences)

Kulliyat Umoore Tabiya provides the basis for the study of Unani medicine as it deals with conceptual fundamentals. According to this, Teaching and learning will be through classroom teaching (Lecture hours) and non- lecture activities which includes Group discussion, Open book discussion, problem based learning, schematic diagram, Audio-visual demonstration etc to enhance the understanding of the subject.

Assessment methods and weightages in brief (4 to 5 sentences)

- 1. Theory-Internal Assessment: 25 Marks, End Semester Examination :75 Marks
&Total Marks: 100.**
- 2. Practical- Internal Assessment: 25 Marks, Practical Examination/ Viva :75 Marks
&Total Marks: 100**

Course Code- UNIUG-UAMF (BUM104) Title of the Course: Urdu, Arabic and Mantiq wa Falsafa

Teaching Hours: **100 hours**

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

- PSO-1 To Explain the fundamental structure, functions and disease mechanism in human body.
- PSO-2 To use the knowledge for making of diagnosis and management of diseases.
- PSO-3 To make single and compound drug formulations and use them in treatment of various diseases.
- PSO-4 To use different treatment modalities for disease management.

After completing this Course, the students should be able to

CLO-1 Recognize, read and write Urdu & Arabic sentences and words related to body parts, diseases, medical instruments and drugs.(Understand)

CLO-2 Explain and describe Urdu & Arabic Terminologies used in different subjects of Unani Medicine. Analyze their root words and their other derivatives, and use them properly.(Understand, Apply)

CLO-4 Translate short Arabic medical texts into English/Urdu language.(Apply)

CLO-5 Analyze and explain the logical explanation of each definition and terminology used in various subjects of Unani Medicine.(Understand and Analyze)

CLO-6 Apply logical reasoning while understanding classical Unani texts. Demonstrate logical approach and rational thinking in diagnosing and treating the diseases.(Understand, Apply)

CLO-7 Identify and explain the Ancient Greek philosophy on which the Unani Medicine is based regarding human and its relation to whole universe. (Understand)

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	3	3	1	1	1	2	2	2	1	2	2	2	3	2	1	2
CL O2	3	3	1	1	1	2	2	2	1	2	2	2	3	2	1	1
CL O3	3	3	1	1	1	1	2	2	1	2	2	2	2	2	1	2

CL O4	3	3	1	1	1	1	2	2	1	2	2	2	3	2	2	1
CL O5	3	3	1	1	1	1	2	2	1	2	2	2	2	2	1	2
CL O6	3	3	2	3	2	2	2	2	2	2	2	2	3	2	1	2
CL O7	3	3	2	3	2	2	2	2	2	2	2	2	3	2	1	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

ARABIC

Unit-1: 45 hours

1. Kalimah aur iske aqşam, Ism, Fael, Harf.

(Word and its kinds, Noun, Verb, Particle).

2. Kalām aur iski aqşam.

(Division of Sentence).

3. Kalāme Tām, Jumlah Ismia, Jumlah Faeliyah.

(Complete Sentence, Noun sentence, and Verbal Sentence).

4. Kalāme Nāqis, Murakkabe Ishari, Murakkabe Izafi.

(Incomplete Sentence, Directive construction, Possessive construction).

5. Ism ki taqseem balehaz-e-Tareef-o-Tankeer, Balehaz-e-Jins, Balehaz-e-Adad.

(Kinds of Noun according to definition like {Definite Noun, Indefinite Noun}, Gender, and Number).

6. Isme Marifah aur iske aqşam (Marif Billam) ke saat Huroof-e-Shamsiyyah-o-Qamariyyah ki wazahath.

(Definite Noun and its kinds, with the mention {Noun with definite article} with the explanation of Shamsi and Lunaan Characters).

7. Ierab, tareef-o-taqseem, Ierab bil huroof, Ierab bil Harkat.

(Inflection Sign, its definition and Division: by letters and by signs).

8. Fael aur iski aqam ba etebar-e-Zamāna: Māzi, Hāl, Mustaqbil.

(Verb and its kinds according to Tense: Past, Present and Future).

9. Fael-e-Sulāsi Mujarrad aur iske Abwāb.

(Trilateral Primitive and its Sections).

10. Gardān-e-Mazi aur Seghae.

(Conjugation of Past tense and Moods).

11. Gardān-e-Muzare aur Seghi.

(Conjugation of indefinite past tense (Aorist) and Moods).

12. Taqseem-e-Fael-e-Māzi-o-Muzarea ba etebar-e-Marroof-o-Majhool.

(Division of Past and indefinite past tense (Aorist) according to Active and Passive).

13. Gardān-e-Fael-e-Amr-o-Nahi.

(Conjugation of Imperative and Prohibitive Verbs).

Unit 2: 5 hours

17. Arabi-o-Tibbi Istelahath-o-Alfaaz ka Jumlon mein istemal.

(Arabic Medical words and Terms and their uses in sentences).

i) Ismai Aza-e-Insan-wo-Ruthubāt-e-Badan.

(Names of the Organs of Human Body and Body Fluids).

ii) Ismai Amraz.

(Names of the Diseases).

iii) Ismai Alāt.

(Names of the Instruments and Equipments)

MANTIQ (Logic)

Unit 3-25 hours

1. Tareef, Mauzu, aur Gharz-o-Ghaiyath. (Definition, aims and objects)

2. Ilm aur Idrak, Aqam-e-Ilm, Tasawwur-wo-Tasdeeq aur iske Aqam.

(Knowledge and Perception, Kinds of Knowledge, Imagination and Judgement and its classification).

3. Mu'arrif ya Qawl-e-Shaareh, Daleel ya Hujjath (Made known, Argument).

4. Dalaalat ki tareef-wo-taqseem, Lafz ki tareef-wo-taqseem. (Evidence: its definition and kinds, Word: its definition and classification).

5. Mafhoom-e-Juzwi wa Kulli mae aqam, Nasab-e-Arba.

(Definition of Individual /Particular and Generals and their kinds, Four Relations).

6. Qazayya, Qaziyyah, Hamaliyya ki jumla aqam, Qaziyyah Shartiyah ki dow qismein:

Muttasila-wo-Munfasila. (Proposition, Clause and its kinds, Conditional Clause and its two kinds viz., Attached and Detached Clause).

7. Bahas, Bahas-e-Tanaqus, Bahas-e-Aks. (Discussion, Contradiction, Contradictory discussion)

8. Hujjat ki aqşam, Qiyas, Istiqra, Tamseel, Qiyas ki qismein (Division of Arguments, Hypothesis/ Analogy, Induction, Allegory and kinds of Hypothesis).

FALSAFA (Philosophy)

UNIT-4 : 15 Hours

1- Hikmat, Tareef-wo-taqseem, Mauzu, aur Gharz-o-Ghaiyath (Philosophy, its Definition and kinds, aims and objects).

2- Jism, Jism-e-Taba'I, Jism-e-Taleemi, Heula, Surat, Jasmiah-o-Surat-e-Nuwia ki tareef (Body, Physical body, Educational Body, Matter, Shape, Definition of Body Shape and Species Shape).

3- Makan, Hayyaz, aur Shaki ki tareef (Definition of Space, locus and Shape).

4- Harkat wa Sukoon ki tareef gharz-o-ghayat, aqşam-o-sharayath.

(Movement and Rest, their definitions, aims and objects, kinds and conditions).

5- Zamānah ki tareef-wo-tauzee. (Definition of Time and its Explanation).

6- Anāsir ki tareef, Aqşam, Kaifiyyāth-wo-Mizaj (Ijmāli Bayan).

(Definition of Elements, kinds, conditions and temperament (with brief description)).

7- Kaun-wa-Fasād, Murakkabate Tāmmah, Jamadāt, Nabatāt-wo-Nafse Nabati, Nafse Haiwani, Nafse Natiqa aur iski matehath kām karne wāli quwwatein, Murakkabat-e-Nāqisa ki tareef mae imsāl. (Anabolism and Catabolism, Complete compounds, Minerals, Plants and Botanical Reason, Animal Reason, Human Reason and faculties working under them. Definition of incomplete compounds along with examples.

Hay'at (Astronomy)

UNIT-6 (5 HOURS)

1. Ilm-e-Hay'at ki tareef, aur tib se iska ta'alluq. (Definition of Astronomy and its relation with Medicine).

2. Khate Sartan, Khate Jaddi, Khate Estiwa, Khate Mintaqatul Buruj.

(Tropic of Cancer, Tropic of Capricorn, Equator, Zodiac Line).

3. Daira Muaddilun Nahar, Daira Nisf-un-Nahar. (Meridian Circle, Mid-Day Circle).

UNIT -7

Ibteda-i-Ilm-un-Nafs (Elementary Psychology) (5 Hours)

1. Ilm-un-Nafs ki tareef-o-aqşam (Psychology, its definition and kinds).

2. Ilm-un-nafs aur Ilm-e-Tib ka Bahami Rabth bayan karte huway Ahsas, Idrak, Mushahidah aur Tawajjuh ka ta'arruf. (Description of interrelation between psychology and Medicine. Introduction of Feelings, Perception, Observat and Attention).

Reference Books:

S.No.	Name of Book	Name of Author
	Urdu	
1	Intikhabe Adab Barae Tibb wo Hikmat	Aftab Alam Najmi
2	Urdu Imla	Rasheed Hasan Khan
3	Urdu Qawaid	Molvi Abdul Haq
4	Urdu Kaise Likhen	Rasheed Hasn Khan
5	Intikhabe Manzooat, Ghazaliyat, Nasr	Utter Pradesh Urdu Academy
	Arabic	
6	Tibbi Arabi Reader	Raziul Islam Nadwi
7	Mu'allimul Inshaa	Abdul Majid Nadwi
8	Asbaqun Nahv (Vol. I, II)	Allama Hameeduddin Farahi
9	Kitabun Nahv	Abdur Rahman Amritsari
10	Kitabus Sarf	Abdur Rahman Amritsari
11	Annahul Wazeh fil Qawaidil lughatil Arabia	Ali al-Jarim and Mustafa Ameen

12	Tamreenun Nahv	Moinullah Nadvi
13	Tamreenus Sarf	Mustafa Nadvi
14	Droos-ul-Lugha Al-Arabiyah	V. Abdur Raheem
15	Minhaaj-ul-Arabiyah	Syed Nabi Hydarabadi
16	Al-Jauharun-Nafees fi Sharh Arjuzat Ash-Shaikh Ar-Raiees	Hakeem Abu Abdul Azeez
17	Online General/Medical Arabic dictionary .	
	Mantiq wa Falsafa	
18	Mabadiyaat Mantiq wa Falsafa	Hakeem Taskheer Ahmad
19	Taiseer-ul Mantiq	Maulana Abdullah
20	Tas'heel-ul Mantiq	Maulana Qari Siddiq
21	Mabaadi'al-Falsafa	Mufti Saeed Ahmad Palanpuri

Teaching-Learning Strategies in brief (4 to 5 sentences)

Most of the classical texts of Unani Medicine are in Arabic language which can be understood with a logical and philosophical approach. Therefore the students need to learn this subject to get better understanding of Unani Medicine. Teaching and learning will be through classroom teaching (Lecture hours) and non- lecture activities which includes Group discussion, Bilingual method, Tutorials , problem based learning, Audio Lingual method and Communicative Approach etc to enhance the understanding of the subject.

Assessment methods and weightages in brief (4 to 5 sentences)

Theory-Internal Assessment: 25 Marks, End Semester Examination :75 Marks &Total Marks: 100.

Environmental Sciences (EVS) does not come under NCISM and It is taught under UGC guidelines.

Course Code: UNIUG-TT (BUM201) Title of the Course: Tareekhe Tib

L-T-P:50+100P

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

PSO-1 To understand the fundamental structure, functions and disease mechanism in human body.

PSO-2 To use the knowledge for making of diagnosis and management of diseases.

PSO-3 To make single and compound drug formulations and use them in treatment of various diseases.

PSO-4 To use different treatment modalities for disease management.

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1 Understand the periodical development of Unani medicine .(Understand)

CLO-2 Distinguish between pre and post Hippocratic ear of Unani medicine.(Understand)

CLO-3 Understand the services of Bait-al-Hikmat and legacy of renowned physicians of medieval era.(Understand)

CLO-4 Explain and understand the significance of classical reference books of Unani Medicine.(Understand)

CLO-5 Describe the introduction of Unani Medicine in Indiaand contributions of famous Indian physicians. (Understand)

CLO-6 Describe the importance of Pre-Independence and Post-Independence established institutes of Unani Medicine, Research council and governing bodies.(Understand)

CLO-7 Appreciate the faithfulness of physicians towards ethics and its application in clinical practice.

(Understand, apply)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	2
CL O2	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	2
CL O3	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	2
CL O4	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	1
CL O5	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	2
CL O6	3	3	2	2	1	1	2	3	3	3	3	3	2	1	1	1
CL O7	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	1
CL O8	3	3	2	2	1	1	2	3	3	3	3	3	2	2	1	1

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus

Teaching hours: 100

UNIT-1

(10hours)

(1) Tareekh-e-Tib aur iski Ahmiyat.

Medical History and its importance.

(2) Fan-e-Tib ki Ibteda aur Fan-e-Tib ke Awwalin Marakiz.

Origin of Medicine and its Primary Centers.

(3) (a) Babuli Tib, Misri Tib aur iske zara-e-Maloomat, (b) Cheeni Tib aur iska Maqsoos Tareeq-e-Ilaj, (c) Irani Tib aur Madars-e-Jund-e-Shahpur, (d) Hindi Tib aur Ayurveda ke mashhoor Waid : (i) Charak, (ii) Sushruth, (iii) Wagbhat.

(a) Babelonean Medicine and Egyptian Medicine and its sources of information, (b) Chinese Medicine and its specific Methodology of Treatment, (c) Iranian Medicine and School of Jund-e-Shahpur, (d) Famous Physicians of Indian Medicine and Ayurveda: (i) Charak, (ii) Sushruth, (iii) Wagbhat.

(4) Tib ke darje zail bunyadi uloom ka ajmali khaka aur mukhtasar tareekh (i) Ilm-e-Tabiyath, (ii) Ilm-e-Kimiya, (iii) Ilm-e-Nabatath, (iv) Ilm-e-Haiwanat, (v) Ilm-e-Madaniyat, (vi) Ilm-e-Hayyat, (vii) Ilm-e-Tashreeh, (viii) Ilm-e-Manaf-ul-Aza, (ix) Ilmul-Jarahath.

Brief description and history of Fundamental subjects of Medicine viz: (i) Physics, (ii) Chemistry, (iii) Botany, (iv) Zoology, (v) Minerology, (vi) Astrology, (vii) Anatomy, (viii) Physiology, (ix) Surgery.

UNIT-2

(10hours)

(5) Tib ke mukhtalif Adwar: (a) Unani Tib ma qable Buqrat, (b) Hazrath Idrees, (c) Tabeeb-e-Awwal Asqaliboos.

Different periods of Medicine: (a) Unani Tib before Hippocrates, (b) Prophet Idrees, (c) First Physician Asqaliboos.

(6) Mandarje zail Atibba-e-Qadeem ke mukhtasar halaath aur karnamein: (a) Buqrat, (b) Arastu, (c) Herofuloos, (d) Irastarastoos, (e) Madarsa-e-Iskandariya ke mukhtasar halaath.

Biographical sketches of ancient physicians and their contribution to the Unani system of

medicine: (a) Hippocrates, (b) Aristotle, (c) Herofuloos, (d) Irastarastoos, (e) Brief description of School of Sikandriya.

(7) Roomi atibba (a) Deasqaridoos, (b) Jalinoos.

Roman Physicians: (a) Dioscorides, (b) Galen.

(8) Bazanteni Tib aur Tabeeb: (a) Fausulmaniti.

Bazantini Medicine and its Physician: (a) Fausulmaniti.

UNIT-3

(15 hours)

(9) Tib-e-Unani ka Arabi daur aur iska tafseeli bayan.

Detailed description of Unani Medicine in Arabic Era.

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(10) Ahde jaheliyat mein Tib: Haris bin Kulha.

Medicine during Age of Ignorance: Haris bin Kulha as a physician.

(11) Tib-e-Nabawi ka ek Jayeza.

Brief description on Prophetic Medicine.

(12) Tib Ahde Khilafat-e-Rasheda mein (a) Amawi daur, (b) Tiyazooq, (c) Ibn-e-Umal, (d) Jaber bin Hayyan, (e) Khalid bin Yazeed.

Medicine in Cliphatic era: (a) Amawi era, (b) Tiyazooq, (c) Ibn-e-Umal, (d) Jaber bin Hayyan, (e) Khalid bin Yazeed.

(13) Tib Abbasi daur mein, Baitul Hikmat, Tib-e-Unani ki taraqqi mein iska hissa.

Medicine in Abbasi era: House of Wisdom, and its role in Development of Unani system of Medicine.

(14) Namwar mutarjimeen: (a) Yuhina bin Masway, (b) Hunain bin Ishaq, (c) Sabith bin Qarha, (d) Yaqoob bin Ishaq, (e) Jibrayeel bin Baqtishu (f) Qusta bin Luqa.

Famous translators: (a) Yuhina bin Masway, (b) Hunain bin Ishaq, (c) Sabith bin Qarha, (d) Yaqoob bin Ishaq, (e) Jibrayeel bin Baqtishu (f)Qusta bin Luqa

(15) Baghdad mein Hindustani Atibba ki amad aur tib par iske asraath, Vedak Kitabon ke Tarjume.

Entry of Indian Physicians in Baghdad and its influence on Medicine, Translation of Ayurvedic literature.

UNIT-4

(20 hours)

(16) Qaroon-e-Wasta ke namwar atibba: (a) Ali bin Rabban Tabri, (b) Ahmed bin mohammed Tabri, (c) Ali bin Abbas Majusi, (d) Abu Bakr bin Zakariya Razi, (e)

Hunnain bin Nuhul Qamari, (f) Abu Sahel Masihi, (g) Ibn Sina, (h) Sharfuddin Ismail Jarjani, (i) Ibne Jazla, (j) Abu Rehan Berooni, (k) Ibne Butlan, (l) Abdul Lateef

Baghdadi, (m) Kamaluddin Irani, (n) Najeebuddin Samarqandi, (o) Alauddin Qarshi, (p) Nafees Bin Awaz Kirmani, (q) Mahmood Amli, (r) Ali bin Esa kahal.

Famous physicians of Middle Age: (a) Ali bin Rabban Tabri, (b) Ahmed bin mohammed Tabri, (c) Ali bin Abbas Majusi, (d) Razes, (e) Hunnain bin Nuhul Qamari, (f) Abu Sahel Masihi, (g) Avicenna, (h) Sharfuddin Ismail Jarjani, (i) Ibn Jazla, (j) Abu Rehan Berooni, (k) Ibn Butlan, (l) Abdul Lateef Baghdadi, (m) Kamaluddin Irani, (n) Najeebuddin Samarqandi, (o) Alauddin Qarshi, (p) Nafees Bin Awaz Kirmani, (q) Mahmood Amli, (r) Ali bin Esa kahal.

(17) Atibba-e-Undulus: (a) Ibn Rushd, (b) Abul Qasim Zahravi, (c) Ibn Wahid, (d) Ibn Zuhur, (e) Ibn Betar, (f) Ibne Khateeb, (g) Moosa Bin Maimoon.

Famous Physicians of Undilus: (a) Ibn Rushd, (b) Abulcasis, (c) Ibn Wahid, (d) Avenzer, (e) Ibn Betar, (f) Ibne Khateeb, (g) Moosa Bin Maimoon.

(18) Atibba Misr-o-Shaam: (a) Dawood Antaki, (b) Ali bin Rizwan, (c) Ibn Haytham, (d) Ishaq bin Sulaiman Israili, (e) Ibn Abi Usaiba, (f) Jamaluddin Qafati, (g) Ibn Qaf Masihi.

Famous physicians of Egypt and Syria: (a) Dawood Antaki, (b) Ali bin Rizwan, (c) Ibn Haysam, (d) Ishaq bin Sulaiman Israili, (e) Ibn Abi Usaiba, (f) Jamaluddin Qafati, (g) Ibn Qaf Masihi.

UNIT-5

(25 hours)

(19) Hisdustan ka tibbi daur: Ahde Tughlaq ke namwar tabeeb, (a) Zia Mohammed Masood Rasheed Farangi, Ahde Lodhi ke Tabeeb, (a) Behwa bin Qawas.

Medicine in India – Brief discussion, Famous physicians of Tughlaq Era: (a) Zia Mohammed Masood Rasheed Farangi, Ahde Lodhi ke Tabeeb, (a) Behwa bin Qawas.

(20) Gujrat ka mashoor tabeeb: Shahab Abdul Kareem Nagori.

Famous physicians of Gujrat: Shahab Abdul Kareem Nagori.

(21) Tib kashmeer mein: Nooh bin Mansoor.

Medicine in Kashmir: Nooh bin Mansoor.

(22) Ahde Moghliya ke namwar tabeeb: (a) Hakeem Ali Geelani, (b) Hakeem Sidra, (c) Hakeem Yousufi, (d) Hakeem Akbar Arzani, (e) Hakeem Hashim Alvi Khan, (f) Hakeem Amanullah, (g) Hakeem Shareef Khan.

Famous physicians of Moghal period: (a) Hakeem Ali Geelani, (b) Hakeem Sidra, (c) Hakeem Yousufi, (d) Hakeem Akbar Arzani, (e) Hakeem Hashim Alvi Khan, (f) Hakeem Amanullah, (g) Hakeem Shareef Khan.

(23) Qutubshahi daur ke namwar hakeem: (a) Hakeem Mir Momin, (b) Hakeem-ul-Mulk

Nizamuddin Gilani.

Famous physicians of Qutubshahi period: (a) Hakeem Mir Momin, (b) Hakeem-ul-Mulk Nizamuddin Gilani.

(24) Nizamshahi daur ke hakeem: (a) Rustum Jarjani, (b) Wali Gilani.

Famous physicians of Nizamshahi period: (a) Rustum Jarjani, (b) Wali Gilani.

(25) Adilshahi daur ke hakeem: Mohammed Qasim Farishta.

Famous physician of Adilshahi period: Mohammed Qasim Farishta.

(26) Asifjahi daur ke tabeeb: (a) Hakeem Raza Ali Khan, (b) Hakeem Shafai Khan.

Famous physician of Asifjahi period: (a) Hakeem Raza Ali Khan, (b) Hakeem Shafai Khan.

(27) Bartanwi ahad ke atibba: (a) Maseeh-ul-Mulk Hakeem Ajmal Khan, (b) Hakeem Abdul Aziz Lucknawi, (c) Hakeem Azam Khan, (d) Hakeem Abdul Hameed, (e) Hakeem Abdul Haleem, (f) Hakeem Abdul Lateef Falsafi.

Famous physicians of British period: (a) Maseeh-ul-Mulk Hakeem Ajmal Khan, (b) Hakeem Abdul Aziz Lucknawi, (c) Hakeem Azam Khan, (d) Hakeem Abdul Hameed, (e) Hakeem Abdul Haleem, (f) Hakeem Abdul Lateef Falsafi.

(28) Chand mashoor atibba: (a) Hakeem Kabeeruddin, (b) Hakeem Ghulam Hussain Kantoori, (c) Hakeem Mohammed Ilyas Khan.

Few famous physicians: (a) Hakeem Kabeeruddin, (b) Hakeem Ghulam Hussain Kantoori, (c) Hakeem Mohammed Ilyas Khan.

UNIT-6

(15 hours)

(29) Hindustan mein tib ki taleem ka naya daur: (a) Taleemi Idare aur Nisaab, (b) A'la Taleem, (c) Unani Tib mein Tahqeeq.

Unani Education system in India in Modern era, (a) Academic Institutions and syllabus, (b) Higher Education, (c) Unani Medical Research.

(30) Hindustan mein (i) Tibbi marakiz: (a) Ayurved aur Unani Tibbi College, Delhi, (b) Takmeel-ut-Tib College, Lucknow, (c) Ajmal Khan Tibbya College, Aligarh, (d) Nizamia Tibbi College, Hyderabad, (e) Hamdard Tibbia College, Delhi.

(ii) Tibbi Khanwade: (a) Delhi, (b) Rampur, (c) Lucknow, (d) Hyderabad, (e) Rajasthan, (f) Bhopal, (g) Madras, (g) Mysore.

(i) Unani Medical Centres in India: (a) Ayurved aur Unani Tibbi College, Delhi, (b) Takmeel-ut-Tib College, Lucknow, (c) Ajmal Khan Tibbya College, Aligarh, (d) Nizamia Tibbi College, Hyderabad, (e) Hamdard Tibbia College, Delhi.

(ii) Eminent medical families in India belonging to: (a) Delhi, (b) Rampur, (c) Lucknow, (d) Hyderabad, (e) Rajasthan, (f) Bhopal, (g) Madras, (g) Mysore.

(31) Ma'baad Azadi Unani marakiz ka khayaam, inki Tareeq, Tadween, Aghraz-o-Maqasid: (a) Central Council of Indian Medicine, (b) Central Council for Research in Unani Medicine, (c) National Institute of Unani Medicine.

Post-Independence Establishment of certain Unani centres, their Aims and Objectives, Development and Functions: (a) Central Council of Indian Medicine, (b) Central Council for Research in Unani Medicine, (c) National Institute of Unani Medicine.

UNIT-7

(5 hours)

(32) Mo'ahida-e-Buqratiya: iska Matan, Mo'ahida -e-Buqratiya ka asar mabaad sadiyon per, Mutalimeen-e-Tib ke Ausaaf, Tabeeb ke Farayz.

Hippocratic Oath: the text and its effect on latter centuries, Ethical Values of Medical Students, Ethical Duties of the Unani Physicians.

Reference Books:

S.No	Name of the book	Language	Author/Translator
1.	Uyunul Amba fil Tabqatul Atibba	Urdu	Ibn Abi Usaiba/CCRUM
2.	Mukhtasar Tareekh ut Tibb Al Arabi	Arabic	Kamal Samarrai
3.	Tabaqat Al Atibba wa Al Hukma	Urdu	Ibne Juljul/ Hakim Abdul Bari
4.	Atibba aur unki Masihai	Urdu	Mukhtar Ahmad Islahi
5.	Atibba Ahde Mughliya	Urdu	Kausar Chandpuri
6.	Tareekh al Atibba	Urdu	Ghulam Jilani
7.	Baitul Hikmat ki Tibbi Khidmat	Urdu	Wasim Ahmad Azmi

8.	Tareekhe Tibb aur Atibba daure Mughliya	Urdu	Hakim Altaf Ahmad Azmi
9.	Tareekhe Tibb(Ibteda ta ahde Hazir)	Urdu	Sayyed Hassan Nigrami
10.	Tareekhe Tibb wa Akhlaqiyat	Urdu	Ashhar Qadeer
11.	Tareekhe Tibb wa Atibba Qadeem	Urdu	Ali Haider Jafri
12.	Tibbe Unani aur Hindustan	Urdu	Ashhar Qadeer
13.	Kulliyat e tibb ke Masadir-o-Marajeh	Urdu	Raziul Islam Nadwi
14.	Tibbi Sahaif	Urdu	Ashhar Qadeer
15.	Rumooz Al Atibba	Urdu	Mohammad Firozuddin
16.	Tareekh al Hukma	Urdu	Jamaluddin Qifti
17.	Qaroon wasta mein Musalmano ki Ilmi Khidmat	Urdu	Maulvi Abdur Rehman
18.	Ahde Jahiliyat mein Arab Fanne Tibb	Urdu	Dr.Ghayasuddin
19.	Tareekhe Tibb	Urdu	Agha Ashraf
20.	Hindustan mein Tibb-e-Unani ka Aghaz wa Irtiqa	Urdu	Hakim Altaf Ahmad Azmi

22.	Hindustan ke Mashhoor Atibba	Urdu	Hakim Hafiz Habibur Rahman
23.	Introduction to the History of Science	English	George Sarton
24.	History of Unani System of Medicine	English	Altaf Ahmad Azmi

Teaching-Learning Strategies in brief (4 to 5 sentences)

Teaching and learning will be through classroom teaching (Lecture hours) and non- lecture activities which includes Symposium, Group discussion, Visit to library & museum, problem based learning, schematic diagram, Audio-visual demonstration etc to enhance the understanding of the subject.

Assessment methods and weightages in brief (4 to 5 sentences)

1. **Theory-Internal Assessment: 25 Marks, End Semester Examination :75 Marks &Total Marks: 100.**

Course Code: UNIUG-TST (BUM202) Title of the course: Tahaffuzi wa Samaji Tib

L-T-P: Lectures 120 hours, Practical/ Non lectures 180 hours

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Recognise the concept of preventive and social medicine as per the Unani literature and modern contexts. (Remember & Understand)

CLO-2 Apply unani fundamental principles, skills as well as current medical knowledge, diagnostic tools and techniques for making diagnosis, treatment and prevention of diseases.

(Apply)

CLO-3 Appraise the preventive aspects of every type of diseases on the basis of Unani and modern concepts. (Analyse)

CLO-4 INTERPRETthe use of modern tools and techniques for prevention of diseases and lifestyle modification. (Evaluate)

CLO-5 Value the importance for higher studies in the field of Tahaffuzi wa Samaji Tibb. (Evaluate)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	1	2	3	2	2	3	1	3	3	3	2	2	1	1
CLO 2	3	3	3	2	3	2	3	2	2	3	3	2	2	2	1	1
CLO 3	2	3	2	3	3	2	3	2	2	2	3	2	2	1	1	2
CLO 4	3	2	2	3	2	2	2	3	2	2	3	3	2	1	1	1
CLO 5	2	2	2	2	3	3	2	2	3	2	2	2	2	1	1	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1:20 hours

1-Tahaffuzi wa Samaji Tibb Definition, historical background, importance, aims and objectives 2. *Sehat* (Health) Definition, aims & objectives and guidelines for health, Detailed discussion of *Asbaabe Sitta Zarooriyah* (six essentials of life), classification of food including macro and micronutrients and balanced diet. 3. *Marz* (Disease) Definition and causes of disease with details. 4. *Tabaee Mahaul* (Physical Environment) *Fizaae Mahaul* (atmospheric environment), components of *Tabaee Mahaul* (physical environment) and its related factors. Factors affecting physical environment (Physical, chemical and biological causes). 5. Air Physical properties and composition. Natural and artificial method for purification of air, procedures for the prevention

and control of diseases caused by air pollution and their preventive measures

Unit 2:20 hours

5. Air Physical properties and composition. Natural and artificial method for purification of air, procedures for the prevention and control of diseases caused by air pollution and their preventive measures 6. Water Sources and types of water, safe & wholesome water, examination of water, purification methods. 7. Environmental Pollution Definition and classification, causes, health effects and preventive measures of different types of pollution i.e. air pollution, water pollution and noise pollution. 8. *Masaakin wa Tahviya* (Housing and Ventilation) Need and importance, disadvantages of ill ventilated rooms, standards of ventilation, different types of ventilation (Natural and Artificial) 9. *Indifae Fuzlaat* (Disposal of Waste) Definition and types of waste, solid waste disposal, excreta disposal, municipal sewage disposal plant, biomedical waste disposal. 10. *Shakhsi Hifzane Sehat* (Personal Hygiene) Healthy habits, cleanliness, menstrual hygiene, Importance of *Ilaj Bit Tadbeer* in *Shakhshi Hifzane Sehat Dalak, Riyazat, Hammam* and bathing. Prevention of lifestyle diseases.

Unit 3:20 hours

Khandani Mansooba Bandi wa Zabte Tauleed (Family Planning and Birth Control) Definition, scope, types of birth control measures: temporary, permanent. 12. *Taadiya* (Infection) Definition, mode of spread, routes of entry of infection, reservoirs of infection and their carriers, classification, quarantine, Incubation period, isolation. Important vectors spreading the disease Concept of *Waba* and related terminologies. 13. Infectious Diseases *Asbaabe Wa'sila wa Moidda* (causative and predisposing factors), causes, sign and symptoms, differential diagnosis, *Muddate Hizanat* (incubation period), *Muddate Tadiya* (infective period) and methods of *Tahaffuz* (prevention) of following diseases: a. *Humeqa* (Chickenpox) b. *Khasra* (Measles) c. *Judri* (Small Pox) d. *Warne Aslul uzn* (Mumps) e. Influenza, Swine Flu, Bird Flu f. SARS g. Chickengunia h. *Shaheeqa* (Pertussis) i. *Khunnaq* (Diphtheria) j. *Diq* (Tuberculosis) k. *Haiza* (Cholera) l. *Deedane Amaa* (Helminthiasis) m. *Hummae Taifoodiya* (Typhoid Fever) n. *Hummae Ijamia* (Malaria) o. *Hummae Asfar* (Yellow Fever) p. *Khaarish* q. *Hummae Danj* (Dengue Fever) r. *Ta'oon* (Plague) s. *Kala Azar* t. *Daul Kalb* (Rabies) u. *Kuzaaz* (Tetanus) v. *Juzaam* (Leprosy) w. *Daul feel* (Filariasis) x. *Faliye Atfaal* (Poliomyelitis) y. *Jamra* (Anthrax) z. AIDS aa. *Iltihaabe Kabid* (Hepatitis) 14. *Manaat and Amale Talqeeh* (Immunity and Vaccination) Immunity: Definition, classification and importance of immunity

Unit 4: 30 hours

15. *Amale Talqeeh* (Vaccination) Definition, types of Vaccines, advantages and disadvantages of vaccines, *Naqshae Tamnee* (Immunization Schedule), *Amale Tamnee ke muzir asraat* (adverse

effects of Immunization) 16. *Amale Tatheer* (Sterilization) Definition, importance & necessity, latest methods, natural, physical & chemical. Information about various *Istilahaat* (terminology) like deodorant, antiseptic, pesticides, insecticides, germicides and detergents etc. 17. *Dafae Ta'affun* (Disinfectant) Sources, methods of disinfection and their indications. 18. San'atee Tibb Definition and importance of occupational health, occupational diseases and hazards and their preventive measures. 19. *Sehati Tanzimat* (Health Organizations) • National health organizations • *Aalami Sehati Tanzeemaat* (International Health Organizations) World Health Organization (WHO), United Nations International Children Emergency Funds (UNICEF), Food and Agricultural Organization (FAO).

Unit 5:30 hours

20. *Nigehdasht Mashaikh* (Geriatrics) Problems of old aged people viz. financial, mental, physical, social and psychological. *Tadabeer-e-Mashaikh* (diet, exercise, massage etc.). 21. *Sehate Aamma* (Public Health) *Tash'heer* (notification), methods of propaganda of public health issues and its importance, school health services. Healthcare at village level, preventive measures and cleanliness in fairs and festivals and prevention of epidemic diseases. 22. *Tibbi Indirajat* (Demography) *Mardum Shumari* (census and registration system), *Sharahe Paida'ish* (birth rate) and *Sharahe Amwaat* (death rate) etc. basic medical statistics, including central tendencies. 23. *Sehati Programmes* (Health Programmes) Primary Health Centers (PHC) Various Health programs run by Govt. of India, healthcare delivery system of India.

Reference Books:

1. Ibne Sina (1992), *Al Qanoon fil Tibb*, Jamia Hamdard, New Delhi.
2. K.Park(2021), Parks textbook of Preventive and Social Medicine(PSM),26 Edition,Banarsidas Bhanot,Jabalpur.
3. Hakeem Mohd Kabiruddin (1934), *Kulliyat e-Nafisi*,Idara Kitab ul Shifa,New Delhi
4. Syed Kamaluddin Husain Hamdani(2015),*Usool e-Tibb*,Qaumi Council baraye Farogh e Urdu Zaban
5. B.Sridhar Rao(2018),*Principles of Community Medicine*,6th Edition,Aitbs Publishers

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. A Holistic approach to healthcare by transforming Tahaffuzi wa Samaji Tibb as a scientific evidence based medicine excelling in Unani education,health care and Research in India and abroad.
2. Apply modern teaching tools to students for transforming course easy and interesting

3. Outreach programmes such as mobile hospital etc.

Assessment methods and weightages in brief (4 to 5 sentences)

1-Creation of the own questionnaire

2-Selected Response

3-Extended Written response

4-Performance Assessments

5-Perssonal communication

Weightage will be according to the NCISM guidelines.

Communication Skills does not come under NCISM and It is taught under UGC guidelines.

Course Code: ... UNIUG-MA (BUM204 A&B)

Title of the Course: *Mahiyatul Amraz (I&II)*

I/A: *Mahiyatul Amraz Umoomi wa Ilmul Jaraseem* (General pathology and Microbiology)

II/B-*Mahiyatul Amraz Nizami*(Systemic Pathology)

L-T-P...L=160, (6.4 Hours per Unit per week) P=260.

TOTAL =420.

(L=Lecture hours, T=Tutorial hours, P=Practical

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1 Explain **understand** the basic nature, epidemiology, structural and functional abnormalities of diseases as per the Unani medicine and modern contexts

CLO-2 **Apply** unani fundamental principles, skills as well as current medical knowledge, diagnostic tools and techniques for diagnosing, staging and prevention of diseases

CLO-3 Analyze and assess the pathogenesis, classification, clinical and histopathological manifestations of diseases of various body systems of diseases on the basis of Unani and modern concepts

CLO-4 Develop the passion for higher studies of in the field of pathology.

CLO-5 Utilize the practical pathological knowledge to properly order and interpret hematologic and coagulation, urine tests, including CBC's, BT,CT, LFT's, KFT's PT's, for the proper diagnosis and effective treatment of patients with hematologic, bleeding, and thrombotic disorders

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	3	3	3	3	3	2	3	2	2	2	2	2	3	2	2	2
CL O2	2	3	2	2	3	2	2	1	2	3	1	2	3	2	2	3
CL O3	3	3	3	2	2	2	2	2	2	2	3	2	3	2	2	3
CL O4	1	2	2	2	2	2	2	2	2	2	3	2	3	2	1	3
CL O5	2	2	3	3	2	2	2	3	1	2	2	1	2	3	2	2

Detailed Syllabus:

Paper I: (100 MARKS) (MAHIYATUL AMRAZ UMOOMI WA ILMUL

JARASEEM)

(General Pathology and Microbiology)

THEORY

I. *IlmulAhwal*

II. *IlmulAsbab*

III. *IlmulAlamaat*

UNIT I-ILMUL AHWAL (6.4 Hours)

(A)

- a) Definitioin of *Sabab* , *Marz* & *Arz*
- b) *Ahwale Badan, Sehat* , *Marz* , *HaalateSalisa*
- c) *Ajnase Amraaz* : *Amraaze Mufradah and AmraazeMurakkabah*
 - i. ***Amraaze Mufradah:*** *Soo-e-Mizaj* , *Soo-e-Tarkeeb* , *Tafarruq Ittesal*,
 - ii. ***Amraaze Murakkabah:*** Definition & classification of *Auram aur uskiaqsaam*.

(B)

- *Zarbe Khaliya* (Cellular Injury): *Fasadat & Saraiyat Nakhr* (Necrosis), *Infarction, Ghangharana*(Gangrene),
- *Tatabuq* (Adaptation): *Zamoor* (Atrophy), *Tazakhkhum* (Hypertrophy), *Metaplasia, Hyperplasia*.
- c) *Iltihab* (Inflammation), *Indemal* (Healing and Repair),
 - *FasadeKhoon andFasadeDawraneKhoon* (Blood &circulatory disorders *Faqruddam aur Aqsam* (Anaemia & types), *Abyazud dam* (Leukaemia &types),
Nazaffudam (Haemorrhage), *Salabate Shiryani* (Arteriosclerosis), *Aqdi Salabate Shiryani* (Atherosclerosis), *akhashuruddam* (Thrombosis), *Tasadududdam* (Embolism), *aflasuddam* (Ischaemia)
- e) *Fasade Rutubate Badan* (Fluid and Electrolyte Imbalance):
Qillate Rutubat (Dehydration), *Tahabbuj* (Oedema), *Sadma* (Shock),
- f) *Mand'at* (Immunity) and AIDS.
- g) *Salaat* (Neoplasm) ka *ajmali bayan* (General description)

UNIT II-ILMUL ASBAB (6.4 Hours)

Asbabe Kulli:

Asbabe Badia, Asbabe Sabiqah, Asbabe Wasila, Ta'dia, Unani main tadiya ka tassavur.

1-Definition & classification of Asbab

2-*Asbabe Badan:*

- o *Asbabe Maddiyah Asbabe Suriyah I AsbabeFailad) Asbabe Tamyah*

- *Asbabe Sehat waMarz*
- (b) *AsbabeSabeqah sabe Badiyah I AsbabeWasilah*
- 4. *Asbabe Zarooriyah*
- (e) *Asbabe GhairZarooriyah*
- (f) *AsbabeMohafizah*
- 7. *AsbabeMughiyyarah*
- 8. *AsbabeMukhallifah*
- (i) *Asbabe Ghair Mukhallifah*
- (j) *Musakhinat, Mubaridat, Mujafiffat*
- (k) *MufsidateShakl*

4-UmoomiAsbab:

- (c) *AsbabeWarm*
- o *Asbabe*
- Tararruqe*
- Ittisal I*
- AsbabeQarah*
- (d) *Asbabe MufsadaateShakal*
- (e) *Asbabe Suddah aur ZeeqeMajari*
- (f) *Asbabe IttisaeMajari*
- (g) *AsbabeKhushunat*
- (h) *AsbabeMalasat*
- (i) *Asbabe Khula*
- (j) *Asbabe SueTarkeeb*
- (k) *AsbabeWaja*
- (l) *Asbabe TaskeeneWaja*
- (m) *Asbabe TaskeeneWaja*
- (n) *Asbabe Tuxhma waImtila*
- (o) *Asbabe Ihtibaas waIstifraagh*
- (p) *Asbabe Zo'feAaza*

UNIT III- Ilmul Alamaat: (6.4Hours)

Alamaat ke Umoomi Tazkira, Alamaat Fariqa, Alamaate Imtla, Ghal'bae Akhlat ke

*Alamaat, Alamaate Amzaja, Alamaate Sauda wa Warm , Alamaate Tafarruqe Ittisal,
Alamaate Riyaah, Waja aur is kesme*

4 ILMUL JARASEEM (MICROBIOLOGY) : (6.4 Hours)

Aqsaame Jarasim (Classification of Micro-organism), *Qluwin* (Staining), *Jarasimi Afaal* (Microbial Activity), Antigen, *Ajsam Ziddia* (Anti –Bodies), their reaction, *Jarasimi Sammiyat* (Toxins),

5 General Description of following bacteria: (6.4 Hours)

Gram Positive Bacteria (Cocci & Bacilli) such as Staphylococcus, Streptococcus, Pneumococcus, Clostridium Tetani, Mycobacterium Tuberculosis & M. Leprae.

Gram Negative Bacteria (Cocci & Bacilli) such as Neisseria Meningitidis and N. Gonococci, Salmonella, E. Coli, Shigella, Vibrio Cholera

Spirochete: Treponema Pallidum

Tufailiyat (parasites), fungi and Virus ka Ajmali Bayan (General description).

PAPER II (100 MARKS)

(MAHIYATUL AMRAZ NIZAMI)

(Systemic Pathology)

Unit 1: Amraaz Qalb wa Urooq (Disease of the Heart & Blood Vessels): (6.4 Hours)

Insidad Shiryan Iklili (Coronary Occlusion), *Iltihab Batana Qalb* (Endocarditis), *Izamul Qalb* (Hypertrophy of the Heart), *Amraaz Azlaate Qalb* (Cardiomyopathies), *Fisharuddam* (Hypertension), *Salaabate Shiryan* (Arteriosclerosis), *Anurisma* (Aneurysm), *Amraz Samamate Qalb* (Valvular Heart Diseases), Pericarditis (*Iltihabe ghilaful-qalb*)

Unit 2: Amraaz Nizam Tanaffus (Diseases of Respiratory System): (6.4 Hours)

Iltihabe Shobi (Bronchitis), *Zaturriyah* (Pneumonia), *Zatul Janb* (Pleurisy), *Tadarrum Revi* (Pulmonary Tuberculosis), *Zeequn Nafas* (Asthama), *Nafkhturriyaya* (Emphysema), *Ittisae Shoeb* (Bronchiectasis)

Unit 3: 1-Amraaze Meda wa Am'a (Gastro –IntestinalDiseases): (6.4Hours)

Qrahae Medi wa Asna Ashree (Gastric & Duodenal Ulcer), *Hummae Mevi* (Enteric Fever), *Ilithab Zayada Aawar* (Appendicitis), *Zaheer* (Dysentery), *Warma Meda* (Gastritis), *Qurooh-e-Qoloon* (Ulcerative Colitis).

2-Amraaze Kabid wa Mirarh (Diseases of Hepato –BiliarySystem): (6.4Hours)

Iltihabe Kabid (Hepatitis), *Talayyaful Kabid* (Cirrhosis of Liver), *Yarquan* (Jaundice), *Dubailatul Kabid* (Liver Abscess), *Iltihabe Mirara* (Cholecystitis), *Hisate Mirara* (Cholelithiasis).

3- Amraaze Banqaras (Diseases ofPancreas):

Ziabetes Shakri (Diabetes Mellitus), *Iltihabe Banqaras* (Pancreas)

Unit 4: Amraaze Kilia wa Masana (Diseases of Kidney & UrinaryBladder): (6.4Hours)

Glomerulonephritis, *Iltihabe Hauzul Kilia* (Pyelonephritis), *Hisat Kilia wa Masana* (Renal & Cystic Stones), *Iltihabe Masana* (Cyststitis)

Unit 5: Amraaze Dimagh (CerebralDiseases): (6.4Hours)

Iltihabe Aghshia (Meningitis), *Encephalitis*, *Jiryannuddam Dimaghi* (Cerebral Haemorrhage)

JUZE AMALI (PRACTICALS)

- ***Qaroora ka Mufasal Imtihan:*** physical, chemical and microscopic examination of urine.
- ***Baraz ka mukammal Imtihan:*** physical, chemical and microscopic examination of stool.
- ***Khoon ka mukammal Imtihan:*** Haematology, Biochemistry and serology
- ***Balgham ka imtihan:*** Sputum examination
- ***Mada manviya ka Imtihan:*** Semen analysis

Histopathological slides kaimtihan

Reference Books:

1. Robbins Basic Pathology First South Asia Edition.(2018), Relex India Book Pvt Ltd.
2. Text Book Of Pathology.8th Edition,2019, Jay Pee Brothers Medical Publishers.23/23B Ansari Road Daryaganj, New Delhi.
3. Praful B.Godkar Darshan P, Godkar, “Textbook of Medical Laboratory Technology”.2nd Edition.2004, Bhalani Publishing House, 11 Mavawala Building ,opposite KEM Hospital, Parel Mumbai.pg-787-1025.
4. RNM MacSween, K Whaley:”Muir’s textbook of Pathology”, 13th Edition, Arnold London, co published by Oxford university Press, Inc, 198 Madison Avenue New York.
5. Walter & Israel General Pathology.7th Edition, 1996, Churchill Livingstone, Medical Division of Pearson Professional Limited.

Teaching-Learning Strategies in brief (4 to 5 sentences)

Pathology is the essential subject of medical and other allied professions. This subject enables the students to know the basic nature with structural and functional abnormalities in various types of diseases. Students are taught with an approach that takes into account the diverse educational backgrounds of the students. Core educational contents like books and lectures both offline and online, group-discussions, classroom interactions open-ended study

Course Code: **BUM203** Title of the Course: ...**Ilmul Advia (Unani Pharmacology)**

L-T-P...4-(L),2 (P).

(L=Lecture hours, T/Tutorial hours-200 hours, P=Practical-100 hours)

PSO-1 To understand the fundamental structure, functions and disease mechanism in human body.

PSO-2 To use the knowledge for making of diagnosis and management of diseases.

PSO-3 To make single and compound drug formulations and use them in treatment of various diseases.

PSO-4 To use different treatment modalities for disease management.

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to..

CLO-1: Inculcate in-depth knowledge about crude forms of drugs and ability to identify them with their physical and organoleptic properties.

CLO-2 Ability to analyze the utility of various drugs and medicines for their practical application in various diseases and disorders.

CLO-3 Capacity to understand and analyze the authentic form of drugs and its impact on human body's physiology.

CLO-4: Demonstrate importance of pharmacokinetics and pharmacodynamics of drugs in relation to its administration, adverse effects, effective and lethal dose etc.

CLO-5: To generate enthusiasm for higher and multidisciplinary research for intellectual growth of individual and the community as a whole.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PL O 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	1	1	2	2	3	3	3	3	2	3	-3	2	1	2
CLO 2	3	3	3	3	3	2	3	2	2	2	3	3	3	2	1	2
CLO 3	2	3	3	3	3	2	2	2	2	3	3	3	2	2-	1	1
CLO 4	2	3	3	2	2	3	2	3	2	2	3	3		3-	2	1
CLO 5	3	3	3	3	3	3	3	3	3	3	3	3		2	2	1-

Detailed Syllabus:ILMUL ADVIA

Paper-I (KULLIYATE ADVIA)

THEORY

UNIT-1

20 hours

1. *Usoole Shanakht Advia* (Principles of Identification of drugs) {Pharmacognosy}

- (i) *Makhaz e Advia* (Sources of drugs)
- (ii) *Wasful aqaqir ke aitbaar se mufrad dawaon ki darjabandi* (Classification of single drugs according to Pharmacognosy)
- (iii) Morphological characters of Unani medicinal plants
- (iv) Taxonomical classification of Unani single drugs

UNIT-220 hours

1. *Dawa, Ghiza, and Zulkhassa: Ta'reef, aksam aur ahmiyat* (*Dawa, Ghiza, and Zulkhassa: Definition, types and importance*) *Mizaje Advia: Ta'reef, aksam aur ahmiyat* (*Mizaje Advia: Definition, types and Importance*)

2. *Sammi Advia wa Tiryaaq : Samm-e-mutlaq , Samoom , fad zehar* (Poisonous drugs and Antidotes)

3. *Badni istalah par Advia Ka T'aseer : Mufradul Quwa ,Murakkabul Quwa wagairah* (Effects of drugs on metabolism : Mufradul Quwa ,Murakkabul Quwa etc.)

4. *Advia ki Ajza'e tarkeebi , Ajza'e mo'esira : Alkaloids, Glycosides aur roghaniyat* (Composition of drugs : Active and non-active constituent- Alkaloids, Glycosides, oils, tannins, saponins, gums, resins, mucilage, phenolic compounds, flavinoids).

5. *Advia ki tabai khusosiyat* (Physical properties of drugs)

UNIT-320 hours

1. *Gair Maa'ruf Advia ki maloomat ke zaraye'* (Principals and methods of assessing the action of unknown drugs)

2. *Qiyas wa tajurba* (Analogy and experimentation)

3. *Mukhtalif nizame jismani par Unani Advia mufradat ke asrat* (Action of Unani single drugs on various systems of the body)

4. *Ashkale Advia* (Different dosage forms)

5. *Masalike Advia* (Routes of administration of drugs)

6. *Hasul, Tahaffuz wa amare Advia* (Collection, storage, preservation and shelf life of drugs)

Unit-420 hours

1. *Muzir aur Musileh* (Adverse effects of drugs and their correctives, and scope of pharmacovigilance in Unani medicine)

2. *Abdale Advia* (Substitution of drugs)

3. *Tanakuz e Advia* (Drug antagonism)

4. *Usoole tarkeebe Advia, ahmiyat wa zaroorat* (Drug compounding: Principles and importance)

UNIT-520 hours

1. *Istelahat e Advia ba Atbare Taseer wa Nauyiate Amal*(terminologies with respect to the effects and actions of drugs) :

- *Aasir, Akkal, Hakkak*
- *Dafae Taffun, Dafae Huma, Dafe Tashannuj Dabiq*
- *Ghassal, Jali, Haliq, Habis*
- *Jazib, Kavi, Kasire Riyah, Lazie, Lazij, Khatim*
- *Muarriq, Moaddil, Moattis, Mufajjir, Muhallil,*
- *Mohammir, Muallide Dam, Muallide Mani, Mubahi*
- *Mubarrid, Mudammil, Mudire Baul, Mudir-e-Tamas, Mudire Laban*
- *Mufareh, Mufatteh, Mufateete Hisat, Mughalliz, Mughazzi*
- *Murakhi Dorane Khoon, Murakh, Muharriqe Aasab, Dimagh wa Qalb*
- *Mujaffif, Munjamid, Mukhaddir, Mukhashin, Mukhrije Janeen wa Masheema*
- *Mulattif, Mulaiyyan, Mulazziz, Mumsik, Munaqqi, Munawwim,*
- *Munbate Shair, Munzij, Muqawwi, Muqawwi Aamma*
- *Muqawwiyyate makhsoosa, Muarikh, Murratib, Mushil, Musaddai*
- *Musaddid, Musaffi Dam, Musakkin, Musakkine Alam, Musammin e Badan*
- *Moutish, Muzayeeq, Mulattif, Muhayyej*
- *Mushtahi, Muzayyede Laban, Muzliq, Nasif, Qabiz, Qateh, Qatil- Deedan Aammae, Radae*

PAPER II (ADVIA MUFRADAH)

THEORY

Darjazail Advia ki shinakhat, Makhaz, hasul, mizaj, afa'l, Mua'ka wa tareeka istema'al, miqdar khurak Mudate taseer, Muzir Asrat, Musleh wa jadeed tahkikat.

(Identification, source, collection, *mizaj*, actions, therapeutic uses, methods of usage, dose, shelf life, adverse effects, corrective measures and recent research information of following single drugs).

Part A: Advia Nabatiya (Plant origin drugs)

50 hours

- a) Abhal, Atees, Azaraqi, Adusa, Aspand, Aspaghol, Afiun, Asgandh, Asaroon, Asrol, Aftimoon, Afsanteen, Anjeer, Atrilaal, Akleelul Mulk, Aloo Bukhara, Aloo Baloo,

Amla, Anar, Anjabar, Anisoon, Aslosus,

- b) Babchi, Badaward, Baboona, Badam, Badranjboya, Bartang, Babool, Barhamdandi, Baranjasif, Bazrulbang, Bisfajj, Biskhapra, Baladur, Balela, Banafsha, Buzidan, Bahman safaid, Bahman surkh, Behi dana, Bahroza, Bedanjeer, Bed mushk, Belgiri, Barahmi, Beesh
- c) Persiyaoshan, Palas papda, Panbadana, Podina
- d) Talmakhana, Tukhme Balanga, Turanj, Turb, Tamar Hindi, Toot, Tudri safaid wa siyah, Taj, Tubud
- e) Salab misri
- f) Javitri, Jozbua, Jamun, Jadwar, Juntiyana, Jawakhar, Jauz maasil
- g) Chaksu, Chiraita, Chob chini, Chob zard
- h) Habbul Aas, Habbus Salateen, Habbul qurtum, Habbul qilt, Habbul ghar, Hilteet, Hulba, Hanzal, Hina
- i) Khaksi, Khatmi, Khubbazi, Khapaza, Khurfa, Kharbaq, Khulanjan, Khayarain, Khyar shambar, Khare khashak, Kahoo, Karfis
- j) Dar hald, Dare filfil, Dar chini, Durmina Turki, Duroonaj Aqrabi, Dammul akhwain
- k) Ral Safaid, Rasut, Reetha, Rehan, Rewand chini
- l) Zarawand, Zarishk, Zaranbad, Zafaran, Zanjbeel, Zufa, Zaitoon, Zeera safed, Zeera siah, Zarnab,
- m) Sazij Hindi, Sapistan, Satawar, Suddab, Sarphoka, Sad Kufi, Saqmoonia, Sumbulut tib, Suranjan shireen, Suranjan Talkh, SadaBahar, Sahajana
- n) Shahatra, Shuqae, Shuneez, Sheetraj Hindi
- o) Satar Farsi, Samaghe Arabi, Sandal Surkh wa safaid, Samaghe Kateera,
- p) Tabasheer
- q) Aqarqarha, Ushba, Unnab, Ood saleeb, Ood gharqi
- r) Ghariqoon, Ghafis
- s) Farfiun, Faranjmushk, Fifil Daraz, Fifil Siyah, Filfil safed
- t) Qaranful, Qinnab (bhang)
- u) Kat safed, Kateera, Kasni, Kafoor, Kakra Singhi, Kaifal, Kabab Chini, Kababah khandan, Kataan, Kasoos, Karanjawa, Kasondi, Kishnee, Kamela, Kundur, Kanghi, Kanocha, Kewda
- v) Gajar, Gaozaban, Gilo, Gule Surkh, Gule Gurhal, Gule Tesu
- w) Loban, Lodh pathani, Lahsun
- x) Mayeen Khurd wa Kalan, Malkangani, Mazoo, Marzanjosh, Mastagi,

Muqil, Mako, Mundi, Maveez

- y) Najeel Daryae, Nilofer, Neem, Nankhawah
- z) Vaj, Halelajat, Haliyun, Heel Khurd, Heel Kalan

Part B: *Advia Maadaniya* (Mineral Origin Drugs)

10 hours

- a) Abrak Safaid wa Siyah, Tinkar, Hazrjul Yahud
- b) Khusul hadeed, Zangar, Zaharmohra.
- c) Safeda kashghari, Sumaq, Sannul far, Sang Jarahat
- d) Shubb-e-Yamani, Shingraf, Shora Qalmi
- e) Tila, Faulad, Kibreet
- f) Gil Armani, Gile Surkh, Gau Danti
- g) Murdar, Sang, Nuqra
- h) Namakiyat, Hartal, Hirakasis

Part C: *Advia Haiwaniya* (Animal Origin Drugs)

10 hours

- a) Abresham, Baiza Murgh, Beer Bahuti, Jund bedastar
- b) Kharateen, Kharmohra.
- c) Reg mahi, Sartan, Sange Saremahi, Saresham Mahi, Sadaf
- d) Asal, Ambar, Ambar ashab, Kafe dariya
- e) Qaranul Aiyal, Luk-e-maghsool, Marjan, Mom, Marvareed

Part D: *Advia Jadeeda* (Modern Drugs)

30 hours

- a) Pharmacological Terminologies: Definition, Scope & Branches
- b) Routes of drug administration
- c) Introduction to Pharmacokinetics: Drug absorption, Drug metabolism, Excretion of drugs, plasma half life and doses.
- d) Introduction to Pharmacodynamics: Non Receptors and Receptor mechanism
- e) Drug Modifying factors
- f) Antiseptics and Disinfectants
- g) Introduction to Pharmacological actions, therapeutic uses, absorption, fate and excretion, doses and adverse effects of the following drugs:
- h) Analgesics: Narcotic and Non-narcotic analgesics, anti-inflammatory and antipyretics.
- i) Sedatives: hypnotics and tranquilizers.
- j) Anesthetics: Local, Spinal and General
- k) Antibiotics: Definition & Classification
- l) Chemotherapeutic Agents : Sulphonamides, tetracyclines, Penicillin, chlorophenicol and Amnioglycosidal Drugs

- m) Antiprotozoals, Antivirals, Anthelmintic, Antifungal drugs
- n) Hormones: Insulin and Thyroid hormones
- o) Contraceptives
- p) I.V.Fluids
- q) Oral Hypoglycemic Drugs
- r) Antihypertensive Drugs

PRACTICAL

100 hours

- *Shanakht Advia*: Demonstration of all Unani drugs prescribed in syllabus.
- Preparing of Herbarium sheets/record book.
- Demonstration of slides of plant (leaf, root and stem) (monocot/dicot, venations, stomatal index etc.)

Reference Books:

- Razi, A.M.Z, (1980) “Kitabul Abdal” C.C.R.U.M, New Delhi.
- Razi, A.M.Z. (1997) “Kitabul Hawi”, Vol.Xth, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
- Razi, A.M.Z. (2002) “Kitabul Hawi”, Vol.Xth, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
- Rehman, S.Z., (1991). Kitabul Murakkabat, Publications division, Muslim University, Aligarh.
- Jurjani, M.H. (1903) “Zakheera Khawarzaam Shahi” (Urdu Translated by Hakim Hadi Hussain Khan), Munshi Nawal Kishore, Lucknow.
- Kabeeruddin, M., (1995). Bayaz-e-Kabeer, Vol. II, Hafiz Shoukat Book Depot, Gujarat.
- Kabiruddin, H. (1951) “Ilajul Amraz” Sheikh Mohammad Bashir & Sons, Lahore, Pakistan.
- Kabiruddin, H. (1951) “Makhzanul Mufradat” Sheikh Mohammad Bashir & Sons, Lahore, Pakistan.
- Ibn-e-Baitar (1999) “Aljamiul Mufradat Al Advia Wal Aghzia” (Urdu), CCRUM, New Delhi, Vol.III.
- Ibn-e-Rushd, A.W.M.B. (1987) “Kitabul Kulliyat” (urdu translation), CCRUM, Delhi.
- Ibn-e-Sina (1927) “Alqanoon Fit Tibb” (urdu translation by Ghulam Hasnain Kantoori) Sheikh Mohammad Bashiir & sons, Lahore, Vol.II.
- Ibn-e-Zohar, A.M. (1986) “Kitab al Taisir Fil Mudawat wa Tadabeer” (Urdu Translation by CCRUM, Ministry of Health and Family Welfare, Govt. of India.
- Khan, A, (1303) H “Muheetul Azam” Dar matba nizami waqah Kanpur.
- Khan, A, (1992) H “Qarabadeen Azam” Ajaz publicating House daryagunj New delhi

- Khan, H.A. (1996) “Qarabadeen-e-Azam” (Urdu translation by Molvi Azmat Ali), Aijaz Publishing House.
- Khan, H.A. (2000) “Haziq” Beeswein Sadi Publications (Pvt) Ltd, New Delhi.
- Khan, M.A. (1940) “Ikseer-e Azam” (Urdu translation by Kabiruddin), Tibbi Compony, Rawalpindi, Pakistan.
- Anonymous, 1987 , Standardization of Single Drugs of Unani Medicine, CCRUM, New Delhi.
- Anonymous, 2010, NFUM, Ministry of Health and Family Welfare, Dept of AYUSH, New Delhi.
- Farha et al 2005, Classification of Unani Drugs, Maktaba Eshaatul Quran', Delhi.
- Kritikar, K.R. Basu, B.D. 1993, Indiaan Medicinal Plants,2nd Edition, International Book Distributions, Rajpur road, Dehradun, India.
- Nadkarni, 2000, The Indian Materia Medica, Bombay, Popular Prakashan, Pvt.Ltd, Bombay
- K.D Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
- Katzung BD, Masters SB, Trevor AJ, basic and Clinical Pharmacology, Tata Mc Graw Hill
- Sharma HL, Sharma KK. Principles of Pharmacology, Paras Medical Publisher

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Practical demonstration of crude drugs and plants by visiting Herbal Garden.
- Open question and answers sessions from student and from teachers.
- Interactive sessions and group discussions among students with faculties.
- Sessionals and tests on regular basis to identify the understanding among students

Assessment methods and weightages in brief (4 to 5 sentences)

1. Final exams are of 100 marks.
2. Internal sessionals will be for 25 marks and final term will be of for 75 marks.
3. Three sessionals would be conducted and best two will be counted

Course Code: BUM 302 Title of the Course: ILMUL SAIDLA

L-T-P :T= 70Hrs..14Hrs/unit, **P-6.66 Hours/week**

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1: Understand fundamentals of Unani Pharmacy along with modern advancements of pharmaceutical industry.

CLO-2: Interpret the classical and modern pharmaceutical processes.

CLO-3: Identify, procure, store and dispense Unani *mufrad* as well as *murakkab* drugs

CLO-4: Usage of *Kushta* and other potent drugs safely in patients.

CLO-5: Prepare quality formulations (small scale) for their own patients in clinical setups.

CLO-6: Supervise manufacturing sections of *Unani* pharmaceutical industry

CLO-7: Follow the rules and regulations Juristically, related to drugs and cosmetics.

CLO-8: Design and develop new dosage forms and redesigning of the existing classical dosage forms.

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	3	2	1	2	2	1	1	3	3	1	1	2	1	2	3	2
CL O2	3	2	1	2	2	1	1	3	3	1	1	2	1	2	3	1
CL	3	2	1	2	3	1	1	2	1	2	1	2	1	1	3	2

O3																
CL O4	3	3	1	3	3	1	2	2	1	2	1	3	1	2	3	2
CL O5	3	3	2	3	3	2	2	3	2	2	2	3	2	1	3	2
CL O6	3	2	1	3	3	3	3	3	2	2	1	3	1	2	2	2
CL O7	2	2	1	2	2	2	2	2	1	3	3	3	1	2	2	3
CL O8	3	3	3	3	3	2	2	3	2	2	2	3	2	1	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1:

(14 Hours)

- Saidla ki tareef**, darjabandi, ahmiyat aur tareekhi pashmanzar
(Definition of Pharmacy, its classification, short history and chronological development of pharmacy.)
- Hindustani Qarabadin ke Khusoosi hawala se Unani tibbi** , Quomi Qarabadin ka **ta'aruf**.
(Introduction to Unani Pharmacopoeias (Qarabadin), National Formulary with special reference to the Indian Pharmacopoeia).
- Awzan-e-Advia** : jadeed wa qadeem auzan wa paimane
(Introduction of ancient and contemporary system of Auzan-e-Advia {Unit of measurement}).
- Mufrad wa murakkab dawao** ke husool, Zakheera andozi, tahaffuz aur tanzeem ke usool wa qwaneen, naiz aml tajfeef, iski aksam, aalat tajfeef, **A'amar e Advia**.

(Brief introduction about collection, storage of simple and compound drugs ,preservation and management for pharmacy stores. Drying: (Different types of Dryer), shelf life of Unani drugs.)

5. **Aamale Dawasazi, istalahat wa askale Advia ka ijmalī bayan :**

(Brief description and application of technical terminologies and different Unani dosage forms)

Taqtee, Daq wa Raz, Bard, Tahmees, Tadheen, Tashwia, Tarveeq, Tajfeef, Tajveef, Tabalwur, Tabkheer, Tarseeb, Tarsheeh, Tasyeed, Ihraq, Taklees, Taqsheer, Dhannab, Tahbeeb, Tasweel, Tabakh, Irgha. Tadbeere Advia,Joshanda, Kheshanda aur zulal.

Unit 2:

(14 Hours)

6. **Safoof** (Powder):

- Mukhtalif chhalniyo ke tawassut se **safoof ki darzbandi** (Size Reduction Standards of sieves, powder gradation.)
- **Tahbib** (Granules): tareeka e tahbib (Methods of granulation)
- Darjazail Advia ki **safoofsazi** (Powdering of the following drugs) : Aarad

Kurma, Ushuq, Muqil, Afiyoon, Rasaut, Mastagi, Abresham, Magziat, Zafran, Hajariyat, Sadaf, Marwareed, Sange Jarahat.

7. **Ba'az dawao ki tareeka tayyari k makhsos aamal:** (Preparatory Methods of certain drugs

- **Amle tarweeq** (specific separation technique) : Barge mako sabz, Barge kasnisabz
- **Amle Tasfia** (Clarification/purification) : Salajeet, Shahad, Kharateen
- **Amle Tasyeed** (Sublimation) : Sammulfar, Gandhak, Kafoor
- **Amle Iqla** (Preparation of Lexiviation/salt): Chirchita, Mooli, Jau

8. **Unani dawao ki tarkeeb tayyari mein GMP ka Ta'ruf wa intebaq**

(Brief description of Good Manufacturing Practices (GMP) in the manufacturing of Unani Drugs)

9. **Drug wa Cosmetic Act ka ta'aruf**

(Introduction to Drugs & cosmetics Act.)

10. **Akras wa Haboob** (Tablets & Pills making process) :

ta'reef, mukhtalif aksam wa khusiyat, tareeka tayyari k aamal makhsosa, mukhtalif rabtajat, inki khamiya, nakayis mukhtalif dyes, gilaf qurs wa hab.

(Definition, Different kinds of tablets and their application, Process involved in the production of tablets; Tablets excipients, Defects in tablets. Different dyes, Tablet coating)

Unit 3:

(14 Hours)

11. **Usaara**

(Extraction): **tareeka e ta'aseer, rub, sat** (Various methods of Extraction).

12. **Tatheer** aur iski aksam

(Sterilization – Concept, types & Significance in relation to Unani Drugs.)

13. **Amal-e-T'areeq** or iske riwayat wa jadeed tarike (Distillation: conventional and modern methods)

14. Darjazail **ashkhas Advia ki aksam, tarteebe ajza wa tarkeeb**

tayyari (Types, formulation, manufacturing procedures of):

- Marham (Ointments)
- Creams
- Pastes
- Gels

15. **Advia ki baham aamejish wa yaksaniyat** – safoof, sayyal, neem jamid dawai ajza kibaham aamezish

(Mixing and Homogenisation of Liquid, powders and semisolid ingredients)

Unit 4:

(14 Hours)

16. **Tasfia or iske mukhtalif zara'e**

(Filtration- Theory of filtration, different filter media)

17. **Ba'az makhsos Advia ke asli or mayari hone ki shinakhat** or inki khususiyat kjaanchne ke tareeke (Methods for identification, determination of quality and purity of certain drugs) : mushk, amber, zafran, Shahad, roghan badam, Roghan Zaitoon, Roghan Kalonji, marwareed)

18. Mukhtalif murakkabat me istemal hone wale qiwam ki tarkeeb, tayyari or rivayati

jadeed tariko se iska tajzia

(Preparation of qiwam for compound drugs and its assessment with the help of refractometer, Sacchrometer)

Murakkabat me mushtamil muwajiza ajza'e shakriya, launiya wa ateria

(Permissible sweetening, colouring & Flavouring agents)

Darjazail qiwami dawa ki tarkeeb, tayyari (Preparation of the following qiwami drugs):

Sharbat, Lauq, Khameera, Majoon, Jawarish, Itrifal, Laboob, Murabbe, Gulqand, sikanjbeen.

19. Roghan aur tila bnane ke mukhtalif tareeke aur

tayyari(Different methods of preparation of oils and tila) :

20. Darjazail Advia ki tadbeer wa islah e Advia ke mukhtalif tareeke

(Methods of tadbeer wa Islah, Detoxification Process/Corrective measures of the following drugs) :

Ajwain, Zeera, Afyoon, Anzaroot, Aelwa, Bahroza, Bhang , Biladur, Habbus Salateen, Azaraqi, Post 38mraz murgh, Turbud, Chaksu, Haleela, Gariquoon, Saqmoonia, Khubsul Hadeed, Gandhak, Sammul faar, Sang Basri, Surma.

Unit 5:

(14 Hours)

21. Aml'e Ihraq wa Taklees ke rivayati wa jadeed tareeke

(Methods of incineration with conventional and modern method)

- Filizzat, Hajariyat, Zavil arwah
- Boota, Gile hikmat, Kaproti, (Use of 'Put' and its types)
- **Darjazail Kushto'n ke hawale se Kham Kushto'n ki shinakht** (Identification of KushtaKham of the following with reference to the following Kushta):

Kusht-e-Tila, Kusht-e-Nuqra, Kusht-e-Faulad, Kusht-e-Tamba, Kusht-e-Qalayee, Kusht-e-Seesa, Kusht-e- Shingraf, Kusht-e-Sammul Faar.

- **Darjazail Kushto'n ki tarkeeb tayyari, istemal aur miqdar e khuraq** (Methods of preparation, mode of administration and doses of the following kushta): Kusht-e-Sammul Faar , Kusht-e-Post 38mraz murgh, Kusht-e-Sadaf, Kusht-e-Marjan, Kusht-e-Abrak,

Kusht-e- Faulad, Kusht-e- Qalayee, Kusht-e-Hajrul yahood, Kusht-e-Khabtul Hadeed, Kusht-e-Musalas.

22. Darjazail **Advia ki Nauiate**

Tarkeeb (Composition of the following drugs)

Dare chikna, Safeda Kashghari, Raskapoor, Kajli

23. **Ba'az makhsoos Aghzia wa Masnua'at aaraish ki tarkeeb tayyari**

(Brief Introduction and preparation method of Dawa-e-Ghizai {Nutraceuticals} and Cosmeceuticals) :

Maul jubn, Maul asl, Maul laham, Maul buzoor, Maul boquool, Maul fawakeh, Maul Shayeer, Ghaziyah (Face powder), Ghaliyah, Kajal, Ubtan (Face packs).

24. **Aml'e Takhmeer ka ta'aruf**

(Introduction to Fermentation):

Preparation of Sirka, Nabeez, Dar Bahra etc.

25. **Aalati dawasazi ka ta'ruf or tareeka e istemal**

(Brief description of Pharmaceutical equipments and their application)

Reference Books:

1. Kabiruddin M. *Bayaze Kabeer*. Part-II. Hyderabad: Hikmat Book Depot, Deccan;(YNM)
2. Kabiruddin M. *Ilmul Saidla*. Eijaz Publication, Delhi
3. Rehman Z. *Jadeed Unani Dawasazi*. Idara Kitabus Shifa. Delhi; 2014.
4. Anonymous. *Qarabadeen Majeedi*. All India Unani Tibbia Conference, Delhi; 1986
5. William L and Wilkins. *Remington The Science and Practice of Pharmacy*. Vol. 1st, 21st ed. New Delhi: Wolters Kluwer Health (India) Pvt Ltd; 2006
6. Gupta AK, Bajaj SS. *Introduction to Pharmaceutics II*. edition 4th. CBS Publishers; 2009
7. Gupta AK, Bajaj SS. *Introduction to Pharmaceutics I*. edition 3rd. CBS Publishers; 2006: 5.
8. Anonymous. *National Formulary of Unani Medicine*. Part-I, New Delhi: CCRUM, Ministry of H & F.W. Govt. of India

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Along with the classical chalk-talk method of teaching, we also use digital audio-visual teaching-learning methods.

- Videos of different pharmaceutical processes has been shown to the students for easy understanding of complicated procedures.
- Teaching in laboratory is also done to demonstrate various pharmaceutical procedures in situ.
- Visit to the leading Unani pharmaceutical industries.

Assessment methods and weightages in brief (4 to 5 sentences)

- The assessment is based on the internal assessment and the annual examination.
- There are two compulsory internal assessment tests (including theory & Viva-voce) having 25% weightage.
- Annual (including theory & practical and Viva-voce) examination will be held at the end of the academic year having the weightage of 75%.

Course Code: UNIUG-ISM (BUM308) Title of the Course: Murakkabat

L-T-P: 3-0-4 T= 70Hrs. 14 Hrs/unit.

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to :

CLO1: To understand aims and objectives or purpose of compounding of the drugs and general description or Introduction of some drugs mentioned in the standard pharmacopoeia and the National Formulary of Unani Medicine.

CLO2: To understand main constituents of compound formulations like Arqiyaat, Sikanjabeen, Sharbat, Laooq, Khameera, Majoon, Anooshdaru, Jawarish, Barshasha, Itrifal, Luboob, Murabba, Gulqand, Tiryaaq, Mufarrehat, Safoof, Qurs, Sheyaf, Qairooti, Kohl, Marham, Kushta

CLO3: To apply therepeutic uses, actions, dosage knowledge of compound formulations like Arqiyaat, Sikanjabeen, Sharbat, Laooq, Khameera, Majoon, Anooshdaru, Jawarish, Barshasha, Itrifal, Luboob, Murabba, Gulqand, Tiryaaq, Mufarrehat, Safoof, Qurs, Sheyaf, Qairooti, Kohl, Marham, Kushta

CLO4: To develop preparation procedures in theory as well as in practical of compound formulations like Arqiyaat, Sikanjabeen, Sharbat, Laooq, Khameera, Majoon, Anooshdaru, Jawarish, Barshasha, Itrifal, Luboob, Murabba, Gulqand, Tiryaaq, Mufarrehat, Safoof, Qurs, Sheyaf, Qairooti, Kohl, Marham, Kushta

CLO5: To do the analysis of some compound drugs for some drugs for SOPs.

CLO6: To evaluate the different physicochemical and analytical procedures.

**Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CLO1	3	3	1	1	2	2	3	3	3	3	2	3	1	2-	-3	1-
CLO2	3	3	3	3	3	2	3	2	2	2	3	3	-2	-3	2-	-1
CLO3	2	3	3	3	3	2	2	2	2	3	3	3	-1	2-	3-	2-
CLO4	2	3	3	2	2	3	2	3	2	2	3	3	1	2-	3-	2-
CLO5	3	3	3	3	3	3	3	3	3	3	3	3	-2	-2	-2	3-
CLO6	2	3	2	3	3	3	3	2	3	3	3	2	1	2	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1:

- (a) Aims and objectives and purpose of compounding of the drugs.
- (b) General description on the following Drugs mentioned in the standard pharmacopoeia and the National Formulary of Unani Medicine.: Arq, Sharbat, Sikanjabeen, Laooq, Majoon, Khameera, Anooshdaru, Jawarish, Barshasha, Itrifal, Luboob, Murabba, Gulqand, Tiryaaq, Mufarrehat, Safoof, Qurs, Sheyaf, Qairooti, Kohl, Marham, Kushta

Unit 2:

Main constituents, Therapeutic uses, actions, dosage and preparation of following compound formulations:

- (a) Arqiyaat: Arqe Mussafi, Arqe Gazar, Arqe Baranjasif, Arqe Gaozaban, Arqe Badiyaan, Arqe sheer murakkab, Maul Laham, Arqe Mako, Arqe Kasni.
- (b) Sikanjabeen: Sikanjabeene sada, Sikanjabeene Bazoori, Sikanjabeene unsuli, Sikanjabeene Na'nayi, Sikanjabeene Lemooni.
- (c) Sharbat: Sharbate Faulad, Sharbate Eijaz, Sharbate Aalu Balu, Sharbate Anjbaar, Sharbate Bazoori, Sharbate Deenar, Sharbate Vard, Sharbate Fawakeh.
- (d) Laooq: Laooqe Sapistan, Laooqe Katan, Laooqe Khayar Shambar, Laooqe Khash'khash, Laooqe Nazli aabe Tarbooz wala, Laooqe Badam, Lawooqe mutadil.
- (e) Khameera: Khameera Abresham sada, Khameera Abresham Hakim Arshad wala, Khamira Abresham Sheerae Unnab wala, Khameera Abresham Ood Mastagi wala, Khameera Gaozaban sada, Khameera Gaozaban Ambari Jawahar wala, Khameera Gaozaban Ambari Jadwar ood Saleeb Wala, Khameera Khash'khash, Khameera Banafsha, Khameera Marwareed, Khameera Sandal.

Unit 3:

Main constituents, Therapeutic uses, actions, dosage and preparation of following compound formulations:

- (f) Majoon: Majoon Aarade Khurma, Majoon Falasfa, Majoon Fanjnoosh, Majoon Murawwihul arwah.
- (g) Jawarish: Jawarish Jalinoos, Jawarish Kamooni, Jawarish Mastagi, Jawarish Podina, Jawarish Bisbasa.
- (h) Itrifal: Itrifal Ustukhudoos, Itrifal Kishnizi, Itrifal Muqil, Itrifal Zamani, Itrifal Kabir, Itrifal Deedan.
- (i) Luboob: Luboob Kabir, Luboob Sagheer.
- (j) Gulqand: Gulqand Suyooti, Gulqand Aftabi, Gulqand Mahtabi,
- (k) Tiryaaq: Tiryaaqe Arba, Tiryaaqe Samaniya, Tiryaaqe Farooq ,Tiryaaqe Pechish, Tiryaaqe Meda, Tiryaaqe Nazla.
- (l) Mufarrehaat: Mufarreh Azam, Mufarreh Sheikhur Rayees, Mufarreh Barid, Mufarreh Yaqooti.

Unit 4:

Main constituents, Therapeutic uses, actions, dosage and preparation of following compound formulations:

- (m) Sofoof: Sofoof Aslussoos, Sofoof Chutki, Sofoof Mulayyin, Sofoof Muqliyasa, Sofoof Bars, Sofoof Muhazzil, Sofoof Namak Sulaimani.
- (n) Sanoon: Sanoon Muqawwi Dandan, Sanoon Poste Mugheelan, Sanoon Tambaku.
- (o) Huboob: Habbe Shifa, Habbe Iyarij, Iyarij Faiqra, Habbe Kabid Naushadri, Habbe Jadwar, Habbe Papita, Habbe Asgand, Habbe Tinkaar, Habbe Paan, Habbe Muqil, Habbe Marwareed, Banadiqul Buzoor, Habbe Surinjan, Habbe Rasaut, Habbe Raal, Habbe Hiltet, HabbeAzaraqi, Habbe Mumsik, Habbe Amber Momiyayee.
- (p) Barshasha, Borood Kafoori, Basaleeqoon
- (q) Dayaqqooza, Dawaul Kurkum Saghir, Dawaul Kurkum Kabir, Dawaul Misk Har, Dawaul Misk Barid, Dawaul Misk Moatadil, Dawaul Misk Jawahar wali.
- (r) Zaroor Kath.

Unit 5:

Main constituents, Therapeutic uses, actions, dosage and preparation of following compound formulations:

- (s) Rubb: Rubbe Anaar, Rubbe Behi, Rubbe Seb, Rubbussoos,
- (t) Roghan: Roghan Aamla, Roghan Baizae Murgh, Roghan Bed Anjeer, Roghan Chehar Barg, Roghan Qust, Roghan Malkangani, Roghan Kaddu, Roghan Samaat Kusha, Roghan Haft Barg.
- (u) Qurs: Qurs Sartan, Qurs Tabasheer, Qurs Kafoori, Qurs Mosallas, Qurs Mulayyin, Qurs Dawaul Shifa, Qurs Malti basant.
- (v) Shiyaf: Shiyafe Abyaz, Shiyafe Aswad, Shiyafe Ahmar Layeen.
- (w) Qairooti: Qairooti Aarade Kar'sana.
- (x) Kohl: Kohlul Jawahar, Kohl chikni Dawa.
- (y) Marham: Marham Mazo, Marham Ushuq, Marham siyah, Marham Zangaar, Marham Dakhiliyoon, Marham Kafoori, Marham Muqil, Marham Rasaut.
- (z) Zimad: Zimad Jalinoos, Zimad Muhalill, Zimad Sumbulut teeb.
- (z1) Tila: Tilae Surkh, Tilae Uroosak, Tilae Muhasa, Tilae Khasul Khas.

Reference Books:

1. UPI 2001: The Unani Pharmacopoeia of India, 1st edition, Part II, Volume I-III. Delhi (IN): Government of India, Ministry of Health and Family Welfare, Department of Indian Systems of Medicine & Homoeopathy.
2. Kabiruddin M, Bayaze Kabir. 5th Edn. (Hyderabad): Hikmat Book Depot, 1935

3. Anonymous. National Formulary of Unani Medicine. Part 1. New Urdu edition; Delhi, MHFW Govt. of India.
4. Anonymous. Qarabadeen Majeedi, All India unani tibbi conference, Ajanta offset and publishing limited,
5. Jilani G, Mukhzanul Murakkabat. New Delhi:Aijaz publishing house, 1995
6. Said HM. Hamdard Pharmacopoeia of Eastern Medicine. New Delhi: Sri Satguru Pulication, 1997.

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Practical demonstration of preparation of some famous compound Unani formulations.
- Demonstration of classical and modern equipments for better understanding of the subject available in the lab or from the books and internet
- Open question and answers sessions from student and from teachers.
- Interactive sessions and group discussions among students with faculties.
- Sessionals and tests on regular basis for the better understanding among students

Assessment methods and weightages in brief (4 to 5 sentences)

- Final exams are of 100 marks.
- Internal sessionals will be for 25 marks and final term will be of 75 marks.
- Three sessionals would be conducted and best two will be counted.

Course Code: UNIUG-TQS (BUM303) Title of the Course: Tibbe Qanooni wa Ilmul Samoom

L-T-P: Lecture 100 hours, Non lecture/ Practical 180 hours

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Explain the concept of Tibbe Qanooni wa Ilmul Samoom as per the Unani literature and modern contexts (Understand)

CLO-2 Apply the principles of medical ethics, etiquettes, duties, rights, medical negligence and legal responsibilities of the physicians towards patients, profession, society, state and humanity at large. (Apply)

CLO-3Analyse the general principles of environmental, occupational and preventive aspects of Toxicology. (Analyse)

CLO-4 Interpret the use of medical knowledge in legal consequences. (Evaluate)

CLO-5 Value the importance of higher studies in the field of Medical Jurisprudence and Toxicology. (Evaluate)

**Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PL O 1	PL O 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	1	2	2	2	2	3	1	3	3	3	2	2	1	2
CLO 2	2	3	3	2	3	2	3	2	2	3	3	2	2	2	3	2
CLO 3	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	1
2CL O4	3	2	2	3	2	2	2	3	2	2	3	3	2	2	2	2
2CL O5	2	2	2	2	1	3	2	2	2	3	2	2	1	1	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write ‘3’ in the box for ‘High-level’ mapping, 2 for ‘Medium-level’ mapping, 1 for ‘Low-level’ mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 20 hours

1. Introduction Definition of Medical Jurisprudence and Forensic Medicine. Courts & their powers and proceedings. Sentences authorized by Law. Medical evidences (medical certificates and medico legal reports). Medical code of conduct. 2. *Shanakht* (Identification) Introduction and types. Points of identification: Age, Sex, Race, Religion, Acquired features (occupational marks, tattoo marks, scars & other malformation), Congenital features (facial appearance, finger prints,

foot prints, hairs and other malformation and their medico legal importance). Basic knowledge of DNA and its medico legal importance, *Naash Brari* (exhumation). 3. Maut (Death) Definition, stages, modes of death (syncope, asphyxia, coma). Sudden death and its causes. Signs of death: Immediate Sign, (cessation of circulation, respiration and brain functions). Early Signs, (changes in eyes, skin, algor mortis, rigor mortis, postmortem lividity). Late Signs, (putrefaction, saponification & mummification). 4. *Marge Tashaddud* (Violent death) Causes & types. Suicide, homicide and accidental death. Asphyxia and its stages, Death from hanging, strangulation, suffocation, drowning, starvation and their medico legal importance. 5. *Jarah wa Zakhm* (Wounds) Definition, characters and medico legal importance of various types of wounds. Sahaj (abrasion), *Razz* (bruise), *Mumziqah* (lacerated wound), *Shaqq* (incised wound), *Wakhziah* (punctured wound) and *Jarahe Nariya* (gunshot wound). Difference between ante mortem and post mortem wounds.

Unit 2: 20 hours

6. *Harq* (Burns) and *Salaq* (Scald) Definition, classification, stages & difference between ante mortem & post mortem wounds and their medico legal importance. 7. *Ananat* (Impotence), *Uqr* (Sterility) Definition causes and medico legal importance. 8. *Dosheezgi* (Virginity) Definition, signs and medico legal importance. 9. Sexual offences Types of natural and unnatural sexual offences. Examination of *Fa'el* (active agent) and *Maf'ool* (passive agent) after *Zina bil-Jabr* (rape) & *lawatat* (sodomy). Examination of blood & semen spots. 10. *Hamal* (Pregnancy) & *Isqaate Hamal* (Abortion) Medico legal importance of pregnancy. Definition, types and signs of abortion. MTP (India) Act 1971 & 1975, *Qatle Janeen* (foeticide), *Qatle Atfal* (infanticide)

Unit 3:20 hours

7-Definition of *Ilmus Samoom* (toxicology) and *Samm* (poison). Classification of poisons. Route of administration of poisons. Action of poison. Modifying factors of the action of poisons. Diagnosis. General principles of treatment in poisoning (removal of unabsorbed poison, use of *Tiryaaq* (antidote), elimination of absorbed poisons, symptomatic treatment and maintenance of general condition of patient). Characteristic poisoning symptoms, *Mohalik Miqdar* (fatal dose), *Muddate Halakat* (fatal period), *Tiryaaq* (antidotes), Treatment, *Zawahir Tashreeh Baadul Maut* (postmortem appearance) & *Tibbe Qanooni Nazaryiah* (medico legal aspect) of the following poisons. 8. *Samoom Akkaal* (Corrosive poisons) *Haamiz* (Acids):- *Hamiz Kibriyati* (Sulphuric acid), *Hamize Malhi* (hydrochloric acid), *Hamize Shora* (nitric acid), *Hamize Khal* (acetic acid), *Hamize Qatran* (carbolic acid), Oxalic acid & Hydrocyanic acid. *Qalviyat* (Alkalis):- *Nutrun Qalvi* (caustic Soda), *Qalmi Qalvi* (caustic Potash), *Choona* (calcium oxide).

Unit 4: 20 hours

9. *Samoom Laziat* (Irritant Poisons) I. *Samoom-Ma'dani* (Metallic Poisons) and their Toxic compounds: *Sammul Far* (arsenic), *Seemaab* (mercury), *Sisa* (lead), *Surma* (antimony). II. *Ghair Dhatee* (Non metallic): chlorine, iodine, *Nooreen* (phosphorus) III. *Samoom Nabaati* (vegetable poisons): *Baladur* (semicarpus anacardium), *Madaar* (calotropis), *Habbus Salateen* (croton seed), *Shahme Hanzal* (colocynth), *Ghoonghchi* (abrus precatorius). IV. *Samoom Haiwani* (Animal poisons):- Signs & symptoms & treatment of *Ladghul Hayya* (snake bite poisoning), *Aqrab* (scorpion bite), *Telni Makkhi* (canthride). 10. *Samoom Asbi* (Neurotic poisons) *Dimaghi* (cerebral):- opium, alcohol, chloroform, kerosene oil, cocaine, thorn apple, *Bhang* (cannabis indica), *Yabroojus sanam* (belladonna), *Azaraaqi* (nux vomica).

Unit-5 20 hours

11. *Qalbi* (cardiac poison):- Tobacco, *Beesh* (aconite). 12. *Sammome Tannaffusi*: Carbon monoxide, carbon dioxide. 13. House hold poisons Tick-20, 44mraz44e44ng44 balls, DDT powder, aluminum phosphate, pesticide, cosmetics like hair dye, shampoo, lipstick, skin cream, eye lotion and eye shades.

Reference Books:

1. CK Parikh(2019), *Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology*, 8th edition, CBS publishers and distributors Pvt Ltd, New Delhi.
2. Rajesh Bardale(2017), *Principles of Forensic Medicine and Toxicology*, 2nd Edition, Jaypee Brothers Medical Publishers, New Delhi
3. K.S.Narayan Reddy, Dr O.P Murthy(2017) *The Essentials of Forensic Medicine and Toxicology*, 34th Edition, Jaypee brothers medical publishers, New Delhi.
4. VV Pillay(2011), *Modern Medical Toxicology*, 4th Edition, Jaypee brothers medical publishers, New Delhi.
5. Justice K Kannan(2018), *A Textbook of Medical Jurisprudence and Toxicology*, 26th Edition, Lexi Nexis Publisher, India

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. A Holistic approach to healthcare by transforming *Tibbe Qanooni wa Ilmul Samoom* as a scientific evidence based medicine excelling in Unani education, health care and Research in India and abroad.
2. Apply modern teaching tools to students for transforming course easy and interesting.
3. Adopt Outreach programmes in different mortuaries.

Assessment methods and weightages in brief (4 to 5 sentences)

- 1-Creation of the own questionnaire
- 2-Selected Response
- 3-Extended Written response
- 4-Performance Assessments
- 5-Personal communication

Weightage will be according to NCISM guidelines.

Course Code: UNIUG-SUI (BUM304) Title of the Course: Sareeriyat wa Usoole Ilaj

L-T-P: Lecture 100 hour- 180 hour Practical/ Clinical Demonstraion

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

- CLO-1 Take proper history of the patient that is essential tool of diagnosis [**Remember**]
- CLO-2 Identify normal and abnormal findings of various disorders by Physical Examination and investigations [**Understand**]
- CLO-3 To follow and perform Unani treatment plan for various diseases [**Understand and Apply**]
- CLO-4 Follow professional ethics in their future clinical practice [**Remember and Apply**]
- CLO-5 Examine the patient independently and make correct diagnosis [**Apply**]

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	1	2	3	3	3	2	3	3	2	3	3	2	3	2	3	2
CL O2	3	3	3	3	3	2	3	3	3	2	3	1	3	2	2	3
CL O3	3	3	3	3	3	1	2	2	3	3	3	2	3	3	2	3
CL O4	3	3	1	3	3	1	3	3	3	3	3	2	3	2	3	3

CL O5	2	3	3	3	3	2	3	3	3	3	3	2	3	2	3	3
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Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: (20 Hours)

Ta'ruf, Sareeriyat ki gharz wa ghayat (Introduction, Aim and Objectives), Roodade Mareez (History taking), Imtehan Mareeze umoomi (General examination of the patient), Istifsarat wa imtehan nizami (Interrogation and systemic examination of the patient), Nizam-e-Hazm (Digestive System) and Nizam-e-Tanaffus (Respiratory System).

Unit 2: (20 Hours)

Imtehan umoomi: Nizam-e-Qalb wa Urooq (Cardiovascular), Nizam-e-Baul wa Tanasul (Urinary & Reproductive System), Nizam-e-izam wa Mafasil (Musculoskeletal System), Imtehan-e-Jild (Examination of Skin), Nizam-e-Asbi (Nervous System), Nafsiyaat (Psychiatry) and Moaina-e-Atfaal (Examination of Children). Behosh Mareez ka Moaina (Examination of unconscious Patients)

- Imtehan-e-Chashm, Uzn wa Anf (Examination of Eye, Ear and Nose)
- Imtehan-e-amrazedamviya (Examination of haemopoietic system)
- Amraz ki zahiri alamat (External manifestation of disease)

Unit 3: (20 Hours)

Nabz (Pulse)

Nabz ki Ta'reef, Dekhne ke tareeqe aur sharai't, Nabz par umoomi tabsira, Ajnase nabz aur unka ijmal bayan, Nabze mufrad ke aqsaam mai ta'raefat, Nabze murakkab ki aqsaam mai Ta'reefat, Asbab-e-nabz, Asbab-e-masika ke ahkam wa aasar, Mukhtalif mizajon ki nabz, Aour ton, Bachchon aur Haamla Aour ton ki nabz, Nabz e auram, Nabze auja, Nabz ke ahkam, Awarize Nafsania ke lihaz se. (Definition, method & precautions to be observed in the

examination of the pulse, Types and definition of Simple and Compound pulse, , factors involving in the formation of pulse, guidelines regarding the essential factors for the existence of the pulse, pulse in various temperaments, pulse in females, children & pregnant women, guideline for the variation of pulse in the different psychic states)

Baul(Urine)

- Imtehan-e-Baulkesharait(Conditions of urine examination)
- Aqsam-e-baulba eitbare(Types of urine in the respect of following points):
- Siqle Izafi(Specific Gravity)
- Laun (Color) Qiwan(Consistency)
- Boo(Odour)
- Jhag(Froth)
- Rusoob(Precipitation)
- Kadoorat(Turbidity)
- Miqdar(Quantity)
- Imtehan-e-Baulbarae Tashkhees-e-Amraz(Examination of urine in respect of diagnosis of diseases)

Baraz(Stool)

- Imtehan-e-Barazbarae Tashkhees-e-Amraz
(Examination of stool in respect of diagnosis of diseases)

Unit 4: (20 Hours)

Alamat waas babsu-e-mizaj sadawamaddi

Ilaaj(Principles of Management)

Amraaz-e-sue Mizaj sadawamaddi ka Usoole Ilaaj: Tadeel watabdeele mizaj

Istifraghemadda: Istifragh ke ahkaam, usool washara'it, aghraaz wamaqasid

Auraam ka Usoole Ilaaj:

- Auraam-e-harrah
- Auraam-e-barida
- Auram-e-hadda
- Auram-e-muzminah
- Auram-e-sulba

- Auram-e-reehi
- **Musakkinat**:-
Dardeumoomiwamaqmiaurmunawwimat,(**Analgesics**:general ,localandhypnotics)

UsooleIlaaj mein MundarjaZailUmoorkeAhkaam:

Mausamkishiddatmeinqawiilaaj,qawiIlaajmeine'aanut,IlaajmeTadreej,TabdeeleAabwaHawa,TabdeeleWaza,Tash'khees na hone ki surat mein Ilaaj, Ilaaj mein

kash'makash.(Guidelinesforthefollowingfactorsinthepinciplesofmanagement :Potenttreatmentinextremeclimate,assistanceinpotenttreatment,gradesinmanagements,changeofclimate,changeofposture, treatment of undiagnoseddiseases,dilemma in treatment)

Unit 5: (20 Hours)

Usoole Ilaaj Nizami:

- Amraz-e-qalb wadauranekhoon
- Amraz-e-tanaffus
- Amraz-e-hazm,kabid,tihalwamararah
- Amraz-e-kulliyya wamasana
- Amraz-e-baah
- Amraz-e-rehamAmraz-e-aaza'enaafsaniyamaslansarsam,laqwa, falij,sudaa
- Amraz-e-guddud-e-laqanatiya
- Amraz-e-naqs--eistehala
- Bezabtatarz-e-zindagisepaidahonewaale48mraz (Lifestyledisorders)

Basicunderstandingoffollowinginvestigations:

- Radiodiagnosis includingCTscanning andMRI
- Scopy(Endoscopy, Laproscopy,Colonoscopy,Sigmoidoscopyetc)
- ECG,ECHO,AngiographyandCardiac catheterization
- Doppler
- FNACandBiopsy
- Tappingoffluid

- Spirometry and PFT

Reference Books:

1. Michael Glynn, William M Drake, Huchison's Clinical Method (25th Edition), 2022, published by Elsevier Health Sciences
2. Andrew R Houghton and David Gray, Chamberlin's Sign and Symptoms of clinical medicine, 13th Edition, 2010, published by Taylor & Francis Ltd
3. J. Alastair Innes, Anna Dover, Karen Fairhurst, Macleod's Clinical Examination, 14th Edition, 2018, published by Elsevier Health Sciences
4. Kamaluddin Husain Hamdani, Usoole Tib, 5th Publication, 2011, published by NCPUL, New Delhi
5. Sina, I., *Al-Qanoon fit Tib* (urdu translation by G.H. Kantoori), 2010, Re-print by Idara Kitabus-Shifa, New Delhi

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Proper Classroom Teaching
2. Regular Indoor Clinical Demonstration and Training (Beside Clinic)
3. Regular Internal Assessments (As per Curriculum provided by NCISM)
4. Identification of Weaker students and Giving Special attention to them
5. Amalgamation of Unani concepts/ theories with Recent Modern knowledge.

Assessment methods and weightage s in brief (4 to 5 sentences)

Final Theory Paper of 100 Marks (75 Theory Examination + 25 Internal marks)

Final Practical and Viva Voce of 100 Marks (75 Practical and Viva Examination + 25 Internal marks)

Practical record maintenance, Preparation of Charts

Course Code: UNI UG - IBT (BUM305) Title of the Course: Ilaj Bit Tadbeer

L-T-P: (L- 70, P- 120,)

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO 1 Define Aims, Objectives, Recommendations, Types, Therapeutic Indications and Recent Advances in , different therapeutic modalities their historical & scientific perspective. (cognitive level-**Remember**)

CLO-2 Recognize detailed description of various Unani regimnal therapeutic modalities along with their indications and contra indication (Cognitive Level- **Understand**)

CLO-3. **Illustrate and Demonstrate details of technical Procedures of various Unani regimnal therapeutic modalities their application in specific diseases (cognitive level – Apply)**

CLO-4 Practice Unani regimnal therapeutic modalities in Health care service setting. (cognitive level- **Apply**)

CLO-5 Relate and Estimate Therapeutic implication of six essential factors and their regimnal importance, for management of disease .(cognitive level-**Evaluate**)

CLO-6 Describe , Diet its types, Balance diet, Diet calories and their method of calculation, Diet in different Age, Sex, & Climates, Malnutrition and its remedy. (Cognitive level – **Evaluate**)

CLO-7 Formulate principle of treatment and procedures of Unani regimnal therapeutic modalities for prevention , treatment and rehabilitation. (Cognitive level – **Create**)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	1	1	2	2	3	1	1	3	3	2	3
CLO 2	3	3	3	3	3	1	1	2	3	2	1	1	1	1	1	2
CLO 3	3	2	3	2	3	1	1	3	3	2	1	2	2	2	1	2
CLO 4	2	2	2	2	3	1	2	2	3	2	1	1	3	2	3	3
CLO 5	3	2	3	2	3	2	1	2	3	2	1	2	3	2	3	2
CLO 6	2	3	3	3	3	3	2	2	2	3	3	2	2	3	3	1
CLO 7	3	3	2	2	3	3	2	2	2	3	3	2	1	3	2	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write ‘3’ in the box for ‘High-level’ mapping, 2 for ‘Medium-level’ mapping, 1 for ‘Low-level’ mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 10Hrs

Detailed description of introduction of *Ilaj-bit-Tadbeer* , Aims and objectives, historical perspective and importance

Therapeutic implication of six essential factors and their regimental importance) and classification of various modes according to *Asbab-e-sitta zarooiya*

Unit 2: 15Hrs

Principles of treatment and guidelines, purpose of the following *tadabeers* ,

Taleeq (Leeching/leech Therapy), *Hijamah* (Cupping), *Fasad* (Venesection) , *Tareeq* (Diaphoresis)

Hammam (Bath/hammam), *Takmeed* (Fomentation), *Amale kai* (Cauterization), *Abzan* (Sitz bath)

Qai (Emesis), *Shamoom* (Aroma Therapy), *Huqna* (Enema), *Natool* (Irrigation/Hydration),

Saoot (Nasal drop), *Lakhlakha* (Inhalation), *Zimaad wa Tila* (Paste/Liniment), *Pashoya* (Foot

bath), *Gargara* (Gargle), *Mazmaza* (Mouthwash), *Tadheen* (Oil Massage/Knead), *Ilaam* (Counter Irritant), *Bakhoor wa in Inqebab* (Vaporisation/Steam inhalation)

Unit 3 :10Hrs

Details description of *Istifragh*, *Munizij o Mus'hil* Therapy

Definition, Aims & Objectives, Recommendations, Types, Therapeutic Application Indications, Oil massage and Recent developments in Massage Therapy.

Definition, Aims, Objectives, Recommendations, Types, Therapeutic Indications and Recent Advances in Exercise Therapy

Unit 4: 10Hrs

Details of the following technical Procedures of Physio-therapy :

Takmeed bil mauj taveela (Long Wave Diathermy)

Takmeed bil mauj sagherah (Short Wave Diathermy)

Takmeed bil Ultra Sound (Ultra Sound Therapy)

Takmeed bil Shiga tahtul Ahmar (Infrared Therapy)

Riyazat treadmill (Treadmill Exercise)

Riyazat katfi da'iri (Shoulder Wheel Exercise)

Tahdeed (Traction)

Ankle Exercise

Knee Continuous Passive movements

Unit 5: Hrs

Diet its types, Balance diet, Diet calories and their method of calculation,

Diet in different Age, Sex, & Climates, Malnutrition and its remedy:

Do 'ran e hamal wa rizayat (Pregnancy & Lactation)

Munafeulazai (Physiological)

Ghizai Atfal, naujawan wa shayukh (Dietary recommendation for children, Adult &

Oldage , *Marazi* (Diseased) : *Saman e Mufrat* (Obesity), *Zaibitis Shakri* (Diabetes Mellitus),

Diq(Tuberculosis), *Qalabi Amraz* (Cardio-vascula diseases), *Amraze Zauf e Mana 'at* (Immuno-difficiency diseases), *Sartani Amraz* (Malignancies), *killat e hayate 'n wa maddiniyat* (deficiencies of Vitamins & Minerals), *Kulwi Amraz* (Renal diseases), *Zigtuddum Qawi* (Hypertension), *Qabdi Amraz* (Hepato-billary diseases), *Farahat ta 'adsum fil dum* (Hyperlipidemia)

Unit 6: 15Hrs

Application of Ilaj-bit-Tadbeer in specific conditions : *Taskeen e waja '(Pain Management)*

Waja 'ul mufasil(Arthritis—Osteoarthritis, Rheumatoid arthritis), Waja 'ul unq(Cervical spondylosis)

Waja 'ul zehar(Lumbago), Laqwa(Bell's Palsy), Faliq(Paralysis), Saqiqa(Migraine),

Sehar(Insomnia)

Zigtuddum Qawi(Hypertension), Do 'ali(Vericose Vein), Do 'aul sadaf (Psoriasis), Irq-ku-nisa (Sciatica)

Muscle Sprain, Tenosynovities, Post Stroke Complications, Fibromyalgia and, Obesity, Chronic Fatigue Syndrome, Frozen Shoulder, Chronic Ulcers, Diabetes mellitus.

Unit 7:10Hrs

JUZE AMALI/ (PRACTICALS) practical demonstration of

- a) *Fasad* (Venesection)
- b) *Hijamah* (Cupping)
- c) *Taleeq* (Leeching/leech Therapy)
- d) *Taqmeed* (Formentation)
- e) *Hamaam* (Bath/hammam)
- f) *Tareeq* (Diaphoresis)
- g) *Abzan* (Sitz bath)
- h) *Aqli Qai* (Cauterization)
- i) *Natool* (Irrigation/Hydration)
- j) *Huqna* (Enema)
- k) *Zimaad wa Tila* (Paste/Liniment)
- l) *Pashoya* (Foot bath)

- m) *Bakhoor wa in Inqebab* (Vaporisation/Steam inhalation)
- n) *Takmeed e bil mauj sagherah* (Short Wave Diathermy)
- o) *Takmeed e bil mauj taveela* (Long Wave Diathermy)
- p) *Takmeed e bil Ultra Sound* (Ultra Sound Therapy)
- q) Traction .

Reference Books:

1. Mohd Isa Nadwi, *Ilaj bit Tadbeer Principles and practice* ,2020,Ist edition ,Publishers Idara kitabush shifa, New Delhi , 636 pages
2. MMH siddiqui, *Basic fundamentals of Ilaj bit Tadbeer* , 2020, Ist Edition Brown books Aligarh. 272 pages
3. Mahfoozur rehman , *Ilaj bit tadbeer* , Publishers Idara kitabush shifa, New Delhi
4. Javed Ahmad Khan, 2011, *Ilaj Bit Tadbeer*,Authors (year), *Title of the Book*, Ist Edition, Hira Computers Deoband , 192 pages
5. Mohd Ehsanullah ,Mohd Inayatullah *Ilaj bit tadbeer jaded Tehqeeqat wa Mufeed tauzeehat* , Ist Edition, 2006, NCPUL New Delhi , Pages 287

Teaching-Learning Strategies in brief (4 to 5 sentences)

Ilaj bit Tadbeer is to enable the student to have a perfect level of theoretical and practical understanding of various Therapeutic Unani Regimenal modalities by demonstration, discussion, and bed side clinical teaching. To get acquainted with the possible remedial intervention either by clinical or theoretical teaching.

Assessment methods and weightages in brief (4 to 5 sentences)

This is based on the guidelines of the NCISM, Govt of India

Paper 100 Marks Theory (breakup Sessional I,II And III= 20Marks in best of two)

In theory examination term courses will be assessed in sessional exams by;

Written exams, Assignments, Presentations etc

Practical 100 +30 + Sessional 1,2 and 3 =20 ForSubject marks in best of two and 20 for internal assessment=250

Term exams for practical will be based on

Viva-voice of the term course, practical record maintenance,group discussions , Preparation of Models and Charts.

Course Code: UNIUG-AAN (BUM306). Title of the Course: Amraze Atfal WaNaumaulood

L-T-P...100+10+100 = 210 Hours

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO1 Understand the fundamental aspects of *Amraze Atfal Wa Naumaulood* (paediatrics and Neonatology).

CLO-2 Understand the detailed knowledge of the disease of different systems.

CLO-3 Clinical Demonstration in the hospital.

CLO-4 Demonstrate understanding and role of history taking to diagnose (diagnosis of a disease) in *Matab or clinic. apply*

CLO-5 Demonstrate understanding the disease after history taking *Tashkhees-e-marz* (diagnosis of a disease) in *Matab clinic. apply*

CLO-6 Demonstrate understanding and role of age in development and growth in *Tashkhees-e-marz* (diagnosis of a disease) in *Matab clinic. apply*

CLO-7 Understand and perform *Ilaj bit tadbeer* (Regimenal therapy) in *Amraze Atfal Wa Naumaulood* (paediatrics and Neonatology) **analyze**

CLO-8 understanding to differentiate the disease between child and adult. **evaluate**

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	1	1	2	2	3	1	1	3	3	2	3
CLO 2	3	2	3	3	3	1	1	2	3	3	1	1	1	1	1	2
CLO 3	3	2	3	2	3	1	1	3	3	2	1	2	2	2	1	2
CLO 4	2	2	2	2	2	1	2	2	3	2	1	1	3	2	3	3
CLO 5	3	3	3	2	3	2	1	2	3	2	1	2	3	2	3	2
CLO 6	2	2	3	3	3	3	2	2	2	3	3	1	2	3	3	1

CLO 7	3	3	2	2	3	2	2	2	2	2	3	2	1	3	2	3
CLO 8	3	3	2	3	3	2	1	2	3	2	1	2	3	3	2	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: CHAPTER 1-5 AS PER Syllabus

CHAPTER-1: Importance of Pediatrics & Pediatric Care in developing countries – INDIA

- a) Why Paediatric care?
- b) What is Paediatric care?
- c) How to deliver Paediatric care?
- d) Responsibility of medical personnel.

CHAPTER-2: History taking and physical examination in paediatrics, Diagnosis & Management in Paediatrics including recent diagnostic procedures.

CHAPTER-3: New born care: Neonatal resuscitation, equipment required, drugs and steps for resuscitation. Examination of a Newborn.

CHAPTER-4: Growth & development & nutrition & nutritional disorders:

- 1) Vitamin Deficiency
- 2) Protein Energy Malnutrition
- 3) Rickets

CHAPTER-5: Immunization, Immunity in Newborn & Children Principles and Practice of Immunization Immunization Schedules (*mana' ati khaka*)

Unit 2: Chapter 6-10 as per syllabus

CHAPTER-6: *Amraz-e-mutaddi* (infectious diseases): Ø

- *Chaikchak, judri* (small pox) Ø
- *Humaiqa* (chicken pox) *Hasba, khasra* (measles)
- *Humma-e-danj* (dangue fever)
- *Humma-e-qarmizia* (scarlet fever)
- *Humma-e-ijamiya* (malarial fever)
- *Humma-e-mevi* (enteric fever)

- Poliomyelitis(*faalij e atfaal*)
- Common cold (*zukaam*)
- Tuberculosis (*53mraz me marz-e-diq*)
- Diphtheria(*khunaaq*) Ø Tetanus (*kuzaaz*)
- Kala-azar Ø
- HIV (AIDS)

CHAPTER-7: Congenital diseases and genetic disorders (*54mraz-e kahlqi wa moaroosi wa janeeni nuqsi 54mraz*): DMD, Haemophilia, Thalassemia, Neural Tube defect, Down's syndrome and other chromosomal disorders.

CHAPTER-8: Breast feeding and diet and nutrition of children: breast feeding, composition of breast milk, colostrums, initiation and technique of feeding, exclusive breast milk. Hazards and demerits of pre-lacteal feed, top milk and bottle-feeding. Feeding of LBW babies. Infants feeding/weaning foods, method of weaning.

CHAPTER-9: Dehydration and its management (rehydration, micronutrient and fluid therapy)

CHAPTER-10: Puberty and related problems.

Unit 3: Chapter 11-15 as per syllabus

CHAPTER-11: Adolescent and related diseases.

CHAPTER-12:*Amrz-e-Dimagh wa Aasab* (diseases of brain and nerves)

- *Isatasqa-e-dimaagh* (hydrocephalus)
- *Warm-e-aghshiya-e-dimaagh* (meningitis)
- *Ummus sibyaan* (epilepsy)
- *Tashannuj-e-afal* (convulsion)
- *Laqwa* (bell's palsy)
- Guillain-Barre syndrome
- Febrile Seizures
- Mental retardation in children

CHAPTER-13:*Amraz-e-Ain* (diseases of eye)

- *Ramad* (conjunctivitis)
- *Shaeera* (stye or hordeolum)
- *Sulaaq* (blephritis)
- *Jarab-ul-ajfaan* (trachoma)
- *Barda* (chalision)

CHAPTER-14:Amraz-e-Gaush (diseases of ear)

- *Iltihab-e-uzn* (otitis)
- *Sailan-e-uzn* (otorrhoea)
- *Qazaf-ul-uzn* (foreign body in the ear)

CHAPTER-15:Amraz-e-Anaf (diseases of nose)

- *Rua' af, nakseer* (epistaxis)
- *Qazaf-ul-anaf* (foreign body in the nose)

Unit 4: Chapter 16--20 as per syllabus

CHAPTER-16:Amraz-e-Dahan (diseases of mouth)

- *Qulaa* (stomatitis)
- *Warm-e-lisaan* (glossitis)
- *Qurooh-e-dahan* (mouth ulcers)
- *Ta'akkul dandan* (dental carries)

CHAPTER-17:Amraz-e-Halaq (diseases of thoroat)

- *Warm-e-lauzatain* (tonsillitis)
- *Warm-e-hanjra* (pharyngitis)
- *Warm-e-aslul uzn or ghudda-e-nakaf*(mumps and parotiditis)

CHAPTER-18:Amraz-e-Tanaffus (diseases of respiratory tract)

- *Sual* (bronchitis)
- *Shaheeqa* (whooping cough)
- *Zeeq-un-nafs* (bronchial asthma)
- *Zaat-ur-ria* (pneumonia)
- *Zaat-ul-janab* (pleurisy)

CHAPTER-19:Amraz-e-Qalb (Cardiac diseases)

- *Kuilqi 55mraz* (congenital heart diseases)
- *Hudari 55mraz-e-Qalb* (rheumatic heart diseases)
- *Taaffuni iltihab-e-ghisha-e-Qalb* (infective endocarditic)

CHAPTER-20:Amraz-e-Maida wa Jigar (diseases of stomach and liver) Ø *Qai* (vomiting) Ø *Tashannuj-e-shikam* (abdominal colic) Ø *Warm-e-kabid* (hepatitis) Ø *Yerqan* (jaundice) Ø Hepatomegaly Ø Splenomegaly

Unit 5: Chapter 21- 26 as per syllabus

CHAPTER-21:Amraz-e-Ama'a wa miq'ad (diseases of intestine and rectum) Ø

➤ *Qabz* (constipation)

- *Is'haal* (diarrhoeal disorders)
- *Paichish, zaheer* (dysentery)
- *Deedan-e-amaa* (worm infestations)
- *Tadarrun-e-maivi* (intestinal tuberculosis)
- *Warm-e-bankharas* (pancreatitis)

CHAPTER-22: *Amraz-e-Tanasulya* (diseases of genitalia)

- *Zeequl ghalfa* (phimosis)
- *Qeela maieeya* (hydrocele) Ø
- *Fataq* (hernia)
- *Warm-e-khusiya* (orchitis)
- Cryptorchidism

CHAPTER-23: *Amraz-e-Majra e Boal* (diseases of urinary tract)

- Acute Glomerulonephritis
- *Warm-e-majra e boal* (UTI)
- Nephrotic syndrome
- *Boul fil farash* (enuresis)

CHAPTER-24: *Amraz-e Dam* (Haematology)

- *Suoo-ul-qinnia, faqrud dam* (anaemia)
- Leukaemia Ø Thalassiam Ø Haemophilia
- Sickle cell disease

CHAPTER-25: *Ghair 56mraz56e gududi ke 56mraz* (Endocrinology)

- Growth disturbances
- Obesity
- Thyroid disease
- Diabetes

CHAPTER-26: Miscellaneous: Drugs & drug dosage in children

Unit 6: Practical

JUZE AMALI (PRACTICALS)

1. *Amraz-e-afal ki tashkhees* (diagnosis of diseases of children)
2. *Mualijat-e-afal ke mutalliq hidayaat* (advices and instructions for paediatrics treatment).

3. *Jadeed tahqiqaat ki roshini me bachchoon ki tabai aur ghair tabai nashau numma key nukaat* (newer researches) .

- History Taking In Paediatrics-20 Case Sheets Should be Prepared. .
- Effective Communication with the Child and Caretakers. .
- Evaluation of the Newborn. .
- Assessment of Diet and Feeding Practices. .
- Breast Feeding and Weaning .
- General Physical Examination .
- Developmental Assessment .
- National Programs on Immunization .
- Cardiopulmonary Resuscitation .
- Resuscitation of an Asphyxiated Newborn Baby .
- Informed Consent for Practical Procedures .
- Universal Precaution and Asepsis Routines .
- Fluid Therapy .
- Oxygen Therapy .
- Nasogastric Tube Insertion .
- Neonatal Resuscitation

Unit 7: Extra classes or tutorials

Reference Books:

Authors (year), *Title of the Book*, Edition, Publishers, Place of Publication, Page Nos.

1. Suraj Gupta, *The Short Book of Pediatrics*, 13th Edition, Jaypee Brothers Medical Publishers
The Health Science Publisher, New Delhi / London, 988
2. A Parthasarathy, *IAP Textbook of Pediatrics*, 4th Edition, Jaypee, 910
3. O.P. Ghai, *Essential Pediatrics*, Second Recised and Enlarge Edition, Interprint, New Delhi,
442
4. Ghai Paul Bagga, *Ghai Essential Pediatrics*, Sevanth Edition, CBS Publisher & distributors,
New Delhi Banglore Pune Cochin Chennai, 768
5. Sibarjun Ghosh, *Beside Clinics in Paediatrics*, Academic Publishers, Kolkata, 387
6. Allama Najeenuddin Samarqandi, *Mualajate Sharhe Asbab*, Idara Kitabush Shifa, Darya Gang
New Delhi,

7. Hakeem Khursheed ahmad Shafqat Azmi, *Amraze atfal*, 1st Edition, Taraqqi Urdu Buro, New Delhi,
8. Waseem Ahmad Azmi, *Amraze atfal*, Urdu Academi, Uttar Parades, 365
9. Kakeem Sayyed Mohd Abbas Rizvi, *Amrazus Sibyan*, Maharashtara State Urdu Acadmi, 264
10. Dr. Muhd Yusuf Ansari, *Amraze atfal*, Idara Kitabush Shifa, Darya Gang New Delhi, 279

Teaching-Learning Strategies in brief (4 to 5 sentences)

Ilmul Atfal is the starting of the disease of human life and little difficult to understand the problem of a child without attendant of the child and the basic knowledge of *Amraz Atfal*. The study is to enable the student to have a perfect level of understanding the subject by demonstration, discussion, and bed side clinical teaching.

To enable the learner to relate himself with any kind of deviation to take history of the patients and understand the patient condition.

To get acquainted with the possible remedial intervention either by clinical or theoretical.

Assessment methods and weightages in brief (4 to 5 sentences)

This is based on the guidelines of the NCISM, Govt of India

Paper 100 Marks Theory (breakup Sessional I, II And III = 20 Marks in best of two)

In theory examination term courses will be assessed in sessional exams by;

Written exams, Assignments, Presentations etc

Practical 100 + 30 + Sessional 1, 2 and 3 = 20 For Subject marks in best of two and 20 for internal assessment = 250

Term exams for practical will be based on

Viva-voice of the term course, practical record maintenance, group discussions, Preparation of Models and Charts.

Course Code: UNIUG-MOA (BUM401, BUM402, BUM403) Title of the Course: Moalajat

L-T-P 160 hrs Lecture hours- 320 hrs Non-Lecture (Clinical/ Practical)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1: Identify the signs and symptoms of different Diseases as per Unani concept

[Remember]

CLO-2: Apply the basic knowledge of Unani Medicine in the Management of different diseases **[Apply]**

CLO-3 Apply the knowledge of modern medical Sciences in the Diagnosis of diseases **[Understand and Apply]**

CLO-4 Treat the patients of Medical diseases with Unani medicine **[Apply]**

CLO-5 Participate in Health care delivery system of the Nation with Leadership skills **[Apply]**

CLO-6 Contribute to the Society with utmost Ethical consideration in the Prevention and Management of different diseases **[Remember and Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	3	3	2	2	3	2	2	2	2	2	3	2	3
CLO 2	3	3	3	3	3	2	2	3	2	3	2	3	3	1	2	2
CLO 3	2	2	3	3	3	2	3	3	3	3	2	3	3	2	3	1
CLO 4	3	3	3	3	3	3	3	3	2	3	3	3	1	3	3	3
CLO 5	3	3	3	3	3	3	3	3	2	3	3	3	2	3	2	3
CLO 6	2	3	3	3	3	3	3	3	2	3	3	3	3	2	3	1

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Moalajat Paper I

Unit 1: Amraze-Nizam-e-A'asab

- Suda`auruskeaqsam

- Sarsamauruskeaqsam(Franeetas,Lasarghas,Utaash,Sarsam)
- WarmeaghshiyaDimagh(Meningitis)
- Cerebro-SpinalFever)
- Sal`at-e-Dimaghi(TumoursoftheBrain)
- KhurajeDimaghi(BrainAbscess)
- Nazaf-ud-DamDimaghi(Cerebralhaemorrhage)
- Taksir-ud-DamDimaghi(Cerebral thrombosis)
- Tasad-ud-Dimagihi(Cerebralembolism)
- Falijauruskeaqsam(Paralysisanditstypes)
- Laqwa(FacialParalysis)
- Sakta
- Istarkha
- Talayyeen-e-Dimagh(SofteningoftheBrain)
- HuzalZohri(TabesDorsalis)
- Dw`ar(Vertigo)
- Sub`at(Coma)
- Nisyan(Amnesia)
- Sara`a(Epilepsy)
- Tashannuj
- Da`ulraqs(Chorea)
- Ra`sha(Tremors)
- MarzeParkinson(Parkinson`sDisease)
- MarzeAlzheimer(Alzheimer`s disease)
- WarmeAa`sab(Neuritis)
- Waja`ulAa`sab(Neuralgia)
- ShaqaQaloosDimaghi
- HumraDimaghiya
- Ma`ashra
- Sidr
- ZakawateHisdimagh

- Tasalub-e-Nukha
- Zagoot
- Imtala-e-Dimagh
- Warm-eNukha

Nafsiyati Amraz

- Ta`arufwadarjabandi(Introductionandclassification)
- Iztarab-e-Nafsani(Anxiety)
- Izmehlal(Depression)
- Ikhtlalshakshiyati(PersonalityDisorders)
- Mania(Mania)
- Male`kholiyaauruskeaqsam(Malengkholiaanditstypes),
- Schizophrenia
- Ikhtanaq-ur-Reham(Hysteria)
- Junoon,Kaboos(Nightmare)
- Sahar(Insomnia)
- Ishq(Erotomania)
- Ra'onatwaHumaq
- IkhtilateAql
- MentalRetardation
- DawaonkiyaSharabkenashekiadat(DrugaddictionandAlcoholism)

Unit 2: Amraze Ghudade Laqanati (Diseases of Endocrine)

- Ghuddaelaqanatiaurunkii frazatkatasawwuratibbakinazarmein(umoomi jayaeza)
- GhuddaeNukhamiakeifrazatki qillatwaifratsehonewaleAmraze.g.,Kibrul Izm(Acromegaly)
- Qazamah(Dwarfism)
- Ziabetussada(DiabetesInsipidus)
- Salatenukhamiya
- GhuddaeDarqiyakeifrazatkiqillatwaifratsehonewaleAmraze.g.,FarteDarqi ya(Hyperthyroidism)

- Tasammume Darqiya (Thyrotoxicosis)
- Graves Disease
- Qillatifraz Darqiya (Hypothyroidism)
- Ghoter (Goiter) Cretinism
- Salate Darqiya,
- Ghuddae Janibuddarqiya ke ifrazatki qillat wa ifrat se honewale Amraze.g., Fart eduraiqiya (Hyperparathyroidism)
- Qusoore Duraqiya (Hypoparathyroidism).
- Amraze Ghuddae Fauqul Kulya like Mutalazema Koshing (Cushing's syndrome)
- Aldosteroma
- Warmul qawatim (Pheochromocytoma), Addison's disease, aldosteromia (Hypoaldosteronism).

Metabolic Disorders

- Diabetes mellitus
- Obesity
- Osteoporosis
- Nuqsetaghzia (Malnutrition)
- Nuqse Injizab (Malabsorption)
- water and electrolyte imbalance

Unit 3: Amraze Tavarus

- Sibghi Jasdi Amraz (Autosomal disorder)
- Sinfi vabasta Amraz (Sex linked diseases)
- Disease of Chromosomal abnormalities (Structural and Numerical)
- Jinsimubtasar (sexual paucity)
- Aajil buloogh (Delayed or Incomplete puberty)
- Mutlazima Klinefelter (Klinefelter's syndrome)
- Down syndrome
- Turner syndrome
- Tasaddiur Rajal (Gynaecomastia)

- Balooghemubtasar(Isosexualprecociouspuberty)

Hummiyat

- Hummiyatkaumoomibayan,JismaniHararat,TauleedwalkhrajaurTawazune Hararatseijmalibehas,TareefeHumma,KulliTaqseem wa ajnaskatazkira, Darjate Hararat, Ista'dade Bukhar, AuqateBukhar, Muddate Bukharpar Alamaat se Istedlal, Bukhar Ke AwarazeLazima, Usoole Tashkhees, AdameTashkhees Ki Soorat me Humma kaUsooleIlaj,Ahkame-ghiza

- **Hummiyat-e-Youm**

Hummiyate YoumparekUmoomibayan,Ta'areef,Aqsam,AsbabwaAlamaat A`ama,UmoomiIlajwatadabeer

- **Humma-eKhiltiyaUfoonia**

umoomibayan,Mustauqadeufoonat,aqsam,UmoomiAsbaabwaAlamaat,Aa mUsooleIlaj,HummaeDamvi,MatbaqaSonukhasiskiaqsam,UfonatwaSukh onat,HummaeSafravi,GhibbeDaira,GhibbLazima

HummaeMuhariqqa,HummaeBalghami,HummaeLisqa(Lazima-wa-Daima),Muwaziba(Naiba),HummaeSaudavi,RubaeDaira,RubaeLazima,H ummae Murakkab,Shatrul Ghib

Hummiyat haddah, Ta'reef, Umoomi ilaj, Awariz-wa-Tadaruk,Ahkam-e-Ghiza

- **Humma-e-Diqkamukammalbayan**

- **Humma-e-Auram**

- **Bohran:**Ta'aref, Umoomi Alamaat, Alamat-e-Bohran-e-Jaiyad and Bohran-e-Raddi, Bohran ki tadabeer

Moalajat Paper II

Unit 1:

Amraz-eTanaffus(RespiratoryDiseases)

- Applied Anatomy and Physiology, Signs & Symptoms, DiagnosticParameters and importantinvestigations oftheSystem.
- Causes,pathogenesis,clinicalfeatures,investigations,diagnosis,differentialdiagnosis,pri nciplesoftreatment,treatment,mamoolatematab,complicationsandimportantprocedures offollowingdisorders:

- Nazla-e-Haar, Baridwa Muzmin
- Sual-e-Yabiswa Ratab
- COPD (Chronic Obstructive Pulmonary Disease)
 - Warm-e-Shoub (Bronchitis)
 - Zeeq-un-Nafas Shoubi (Bronchial Asthma)
 - Nafkhat-ur-Riya (Emphysema)
 - Ittisae Shobat-ur-Riya (Bronchiectasis)
- Tadarrun-e-Revi (Pulmonary Tuberculosis)
- Zatur Riya (Pneumonia)
- Dubaelat-ur-Riya (Lung Abscess)
- Nafkhat-us-Sadr (Pneumothorax), Hyderothorax (Ma'us Sadr), Haemothorax)
- Taqueh-ur-Riya (Empyema)
- Zat-ul-Janb/shusa (Pleurisy)
- Istaqa-us-Sadr (Pleural Effusion)
- Acute Respiratory Distress Syndrome (ARDS)
- Sartane Shobat-ur-Riya (Bronchial Carcinoma)
- Talayyufal Riya (Fibrosis of Lungs)
- Easinophillia
- Environmental Pulmonary Disorders
- Occupational Hazards
 - Silicosis
 - Asbestosis
- Fungal Infection of lung (Aspergillosis, Actinomycosis)
- Basic knowledge of following investigation and procedures:
 - Examination of Sputum
 - Radiological investigations (X-ray, USG, CT chest, MRI)
 - Bronchoscopy
 - Pleural Aspiration
 - Cytology
 - Biochemistry
 - Biopsy
 - Pulmonary Function Test/Spirometry
 - Allergic sensitivity test

Unit 2

Amraaz-eQalbwaDauran-eKhoon(Cardio-VascularDiseases)

- Applied Anatomy and Physiology, Signs & Symptoms, Diagnostic Parameters and important investigations of the System.
- Causes, pathogenesis, clinical features, investigations, diagnosis, differential diagnosis, principles of treatment, treatment, mamoolate matab, complications and important procedures of following disorders:
 - Soo-e-Mizaje Qalb (Altered temperament of Heart),
 - Warm-e-Uzn-ul-Qalb,
 - Izm Uzn-ul-Qalb (Atrial Hypertrophy),
 - Izm Batan-ul-Qalb (Ventricular Hypertrophy),
 - Ghashi (Syncope),
 - Khafqan (Palpitation),
 - Fallot's Tetralogy,
 - Iltihabe Qalb aur Aqsam (Carditis and types),
 - Iltihabe Ghilaf-ul-Qalb (Pericarditis),
 - Istisqa-ul-Qalb (Pericardial Effusion),
 - Iltihabe Azlat-ul-Qalb (Myocarditis),
 - Amraze Azlate Qalb (Cardiomyopathies),
 - Iltihabe Betanae Qalb (Endocarditis),
 - Daul Qalb Hudari (Rheumatic Heart disease),
 - Amraze-e Samamaate Qalb (Valvular diseases),
 - Tazayyuqe Zur-rasain (Mitral Stenosis),
 - Tazayyuqe Aorta (Aortic Stenosis),
 - Qusoore Zur-rasain (Mitral Incompetence),
 - Qusoore Aorta (Aortic Incompetence),
 - Daul Qalb Revi (Cor Pulmonale)
 - Iflaase Qalb (Ischaemic Heart Disease)
 - Wajaul Qalb (Angina Pectoris),
 - Maitootatul Qalb (Myocardial Infarction)
 - Arrhythmias
 - Sura'at-e-Qalb (Tachycardia)
 - Batu-e-Qalb (Bradycardia)
 - Manuate Qalb (Heart Block)
 - Suqoote Qalb (Heart Failure)

- Cardiac Arrest

Unit 3

Amraze-Urooqe Damviya (Diseases of Blood Vessels)

- Tasallube Sharaeen (Atherosclerosis)
- Iltihab Auridah Takhasuri (Thrombophlebitis)
- Zaght-ud-Dam Qawi (Hypertension)
- Suqoote Daurane Khoon (Circulatory failure)

Amraz-e Dam wa Lymphaviyah (Diseases of Haemopoetic and Lymphatic System)

- Anemia (Faqrud Dam/Sual Qiniya) - Introduction, Classification, and clinical presentation, diagnosis, and special emphasis on Thalassemia and Sickle cell anemia
- Nazfud Dam Mizaji (Haemophilia)
- Qillate Sufehiyat-ud-Dam (Thrombocytopenia)
- Abyazud Dam (Leukaemia)
- Lymphoma
- Amraze Tihal (Diseases of Spleen):
 1. Warme Tihal (Inflammation of Spleen)
 2. Sartane Tihal (Carcinoma of Spleen)
 3. Izm-e-Tihal (Spleno-megaly)

Basic Knowledge of Following Investigation and Procedures:

1. Electrocardiography (ECG)
2. Echocardiography & Treadmill Test
3. Angiography & Angioplasty
4. Cardiac Catheterisation
5. Pericardial Paracentesis
6. Cardiac Biomarkers
7. Lipid Profile

Moalajat Paper III

Unit 1

Amraaze-Nizame Hazm (Diseases of Digestive System)

- Applied Anatomy and Physiology, Signs & Symptoms, Diagnostic Parameters and

important investigations of the System.

- Causes, pathogenesis, clinical features, investigations, diagnosis, differential diagnosis, principles of treatment, treatment, mamoolatamatab, complications and important procedures of following disorders:
 - Amraze-eMari (Diseases of Oesophagus)
 - WarneMari (Esophagitis)
 - IstirkhaeMari (Achlorasia Cardia)
 - TaqahqureMari (Refluxesophagitis)
 - Usrulbal'a (Dysphagia)
 - AmrazeMeda (Diseases of stomach)
 - Zoafe-Meda (weakness of the stomach)
 - Sooe-MizajMeda (altered temperament of Stomach)
 - Warne-Meda (Gastritis)
 - WajaulFawad
 - QarheMedawaAsnaAshri (Gastric & Duodenal ulcer)
 - Sartane-Meda (Carcinoma of stomach)
 - Naf'kh (Flatulence)
 - Fawaq (Hiccup)
 - QillatwakasratehumoozateMedi (Hypo and hyperacidity)
 - NuqseIshteha (Anorexia)
 - Ghasyan (Nausea), Qai (vomiting), Tehevvo (Eructation),,
 - Joo'ulbaqar (Bulimia)
 - Zauf-e-Hazm, Soo-e-Hazm, Tukhma
 - Qai-ud-dam (Haemetemesis)
 - Baraz-ud-dam (Melaena)
 - Amraz-eAma'a (Intestinal diseases)
 - Warm-eAma'a (Enteritis)
 - Tadarrun-eMevi (Intestinal tuberculosis)
 - Is'hal (Diarrhoea)
 - WarneQolon (Colitis)

- Crohn's disease
- Zaheer (Dysentery)
- Sahaje Ama'a (Intestinal Abrasion)
- Zalaqul Ama'a
- Illat e tahreek-e-Mevi (Irritable bowel syndrome)
- Qoolanje Ama'a (Intestinal colic)
- Deedane Ama'a (Intestinal worms)
- Bawaseer (Haemorrhoids)
- Qabz (Constipation)
- Amraz-e Kabid (Liver Diseases)
 - Zoufaur Saqoot Kabid (Hepatic Insufficiency and Failure)
 - Sooemijaz Kabid (Altered Hepatic Temperament)
 - Warm-e Kabid (Hepatitis)
 - Dubailatul Kabid (Liver abscess)
 - Talayyuf-ul-Kabid (Cirrhosis of liver)
 - Sartanul Kabid (Hepatic carcinoma)
 - Yarqan (Jaundice)
 - Izme Kabid
- Amraz-e Mirara (Diseases of Gall Bladder)
 - Warm-e Mirara (Cholecystitis)
 - Hisatul Mirara (Cholelithiasis)
 - Sartan-e Mirara (Carcinoma of gall bladder)
- Amraz-e Baritton (Diseases of Peritonium)
 - Warme Baritton (Peritonitis)
 - Istisqa (Ascitis) aur isske aqsaam
- Amraz-e Banqaras (Diseases of Pancreas)
 - Warm-e Banqaras (Pancreatitis)
 - Warm-e Baritton (Peritonitis)

Unit 2

Amraze-e Nizame Baul (Disease of Urinary System)

- Sue Mizaj Kulliya
- Zoufewa Huzale Kuliya
- Warne Kulliya (Nephritis)
- Diqqul Kulliya (Renal tuberculosis)
- Hisatul Kulliya (Renal stones)
- Wajaul Kulliya (Renal colic/Nephralgia)
- Istesqaul Kuliya (Hydronephrosis)
- Nephritis syndrome
- Tasammume bouli (Uraemia)
- Suqoot-e-Kuliya (Renal Failure)
- Amraze-e-Masana (Bladder Disorders)
- Zoafe Masana (Dystonia of the bladder)
- Warne Masana (Cystitis)
- Hisate waramale Masana (Bladder Stones)
- Ihtebase Baul (Retention of urine)
- Salasul Baul and Taqteerul Baul
- Bauluddam (Haematuria)
- Tadia Majra-e-Bauli (Urinary Tract Infection)
- Baule Zulali (Proteinuria/albuminuria)
- Kasratwa Qillate Baul (poly and Oliguria)
- Baul filfarash (Bedwetting)

Amraze-e-Tanasul (Genital Disorders)

- Zoafe bah (Anaphrodisia)
- Sur'ate Inzaal (Premature ejaculation)
- Kasrate Ihtelam (Excessive nocturnal emissions)
- Jiryanemani wamazi (Semenorrhoea Prostatorrhoea)
- Warmeghuddaemazi (Prostatitis)
- Warne Khusia (Orchitis)
- Qillate manaviya (Oligospermia)

- QillateHuwainiyatmanaviya(Oligozoospermia)
- Erectiledysfunction(NuqseNaooz)
- Uqr(Infertility)

Unit 3

AmrazeMutaddiyeh

Causes, pathogenesis, clinical features, investigations, diagnosis, differentialdiagnosis, principles of treatment, treatment, mamoolat-e-matab, complicationsand importantprocedures of followingdisorders:

1. Amraz-e-Mutaddiwabai

- **Conceptandclassificationofinfectiousdiseases,usoole-ilajwailaj**
- **BriefdiscussionofBacterial,viral,protozoalandhelmenthiccausesof fever**
 - Hummae Meviya(Typhoidfever)
 - Hummae Ijamia(Malarialfever)
 - KalaAzar(Lieshminiasis)
 - Hummae Hudariya(Rheumaticfever)
 - Hasba/Khasra(Measles)
 - Humaiqa(Chickenpox)
 - Anafulanza(Influenza)
 - Ta'oun(Plague)
 - Hummae Danj(Denguefever)
 - Hummae Asfar(Yellowfever)
 - Hummae Qurmiziya(Scarletfever)
 - BirdFlu
 - Ebola
 - Chickungunia
 - SwineFlu
 - ZikaVirus
 - SARS
 - Coronavirus disease

- KanasurForest Fever(MonkeyFever)
- Pyrexiaofunknownorigin
- AIDS
- Kuzaaz(Tetanus)

Amraze-MafasilwaIzaam

- Wajaul-Mafasil–Rakba,Unq,Zahar,Qutun,Khasira,Warik,Aqib,Katifetc).
- Iltehabe- Mafasil
- Niqras
- Irqunnasa
- Tahajjure- Mafasil
- Hadba-wa-riyahul-afrsa
- Iltihabul-fuqrat
- Wajaul mafasil hudari (RheumatoidArthritis)
- Osteomyelitis
- Osteomalacia (Layyanul Izaam)
- Kussah(Ricketes)

MatabwaNuskhaNaveesi

- TaraqiMatabkeUsool waZavabit
- Fan-e-NuskhaNavesi
- NuskhaNavesikeUsool
- MatabkeKhusoosiyat
- TabeebkeKhusoosiyat
- UsoolwaRamoozellaj
- Usoolellaj
- AamaleDawaSaazi
- Tibbi Auzan

- Miqdaar Khurak
- Biochemistry, Haemotological values,
- Usooletashkhiswatajvizmaijadeedizafaat
 - a. Biochemistry
 - b. Haemotological values,
- Nuskha Khalale Shikam
- Nushka Naveesi wamujaribat
 - Amraze Raas wa Asab
 - Amraze Qalb wa Dauranekhoon walymphavia
 - Amraze Sadar
 - Amraze Meda, mari, Ama
 - Amraze Kulliya, Baulwatanasul
 - Amraze Jigar, Tihalwabanqaras
 - Amraze Mafasil
 - Hummiyat, Amraze Wabaiyaka Usoole Ilaj

1. **Refence Books** Ibn Sina, Al Qanoon Fit Tib (Urdu Translation by Ghulam Hasnain Kantoori), 2010, Idara Kitab us Shifa
2. Abul Hasan Ismail Jurjani, Zakheera Khawarizam Shahi (Urdu Translation by Hadi Hasan), 2010, Idara Kitab us Shifa
3. Majoosi, Kamil us Sana'a (Urdu Translation by Ghulam Hasnain Kantoori) Idara Kitab us Shifa
4. Mohammad Kabiruddin, Tarjuma Kabir (Sharah Asbab- Urdu), 2007, Aijaz Publishing House, New Delhi
5. Joseph Loscalzo, Anthony S. Fauci, Dennis L. Kasper et al., Harrison's Internal Medicine, 21st Edition, 2022, published by Mc Graw Hill Professionals
6. Stuart Ralston, Ian Penman, Mark Strachan, Richard Hobson, Davidson's Principal and Practice of Medicine, 23rd Edition, 2018, Pbulished by Elsevier Publications
7. Matab wa Nuskha naveesi by Prof. Abdul Mannan
8. Mamoolate Matab Ajmal Khan Tibbiya College hospital, Aligarh by Prof Abdul Mannan

9. Tajarbaat-e-MatabbyHakeemAbdul Mannan
10. Tazkarah-e-Jaleel byHakeemJaleelAhmed

Teaching-Learning Strategies in brief (4 to 5 sentences)

Proper and regular Classroom Teaching
Exhaustive Clinical training in OPD and IPD
Case Studies and Assignments

Assessment methods and weightage s in brief (4 to 5 sentences)

As per NCISM Guidelines

Course Code: UNIUG-QAN(BUM404 ,BUM403)

Title of the Course: ILMULQABALAT WA AMRAZE NISWAN

Paper I- Ilmul Qabalat; Paper II – Amraze Niswan.L=100. P 170,

UNIUG-QAN { L=100.P=170

Teaching Hours per Unit= 16.6 hrs per Unit.

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1- Explain **Analyse and understand** the clinical presentations of various diseases, related to gynaecology and pregnancy, along with functional abnormalities of diseases as per the Unani medicine and modern contexts

CLO-2 **Apply** Unani fundamental principles, skills as well as current medical knowledge, diagnostic tools and techniques for diagnosing, staging and prevention of diseases.

CLO-3 **evaluates and assessment of the** clinical presentations of diseases of Female genital system on the basis of Unani and modern concepts.

CLO-4 **Utilize** the practical knowledge, to perform the deliveries, antenatal care, postnatal care, Colposcopy handling, surgical interventions related to the field. pathological knowledge to properly order and interpret hematologic and coagulation, urine tests, including CBC's, BT,CT, LFT's, KFT's PT's, for the proper diagnosis and effective treatment of patients with hematologic, bleeding, and thrombotic disorders.

CLO-5 **Develop** the passion for higher studies of in the field of Gynaecology & Obstetrics, also develop the medical interview and physical exam & to provide culturally competent health care.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CLO 1	3	3	3	3	3	2	3	2	2	2	2	2	3	2	1	2
CLO 2	2	3	2	2	3	2	2	1	2	3	1	2	1	1	1	3
CLO 3	3	3	3	2	2	2	2	2	2	2	3	2	3	3	1	3
CLO 4	1	2	2	2	2	2	2	2	2	2	3	2	2	1	2	3
CLO 5	2	2	3	3	2	2	2	3	1	2	1	1	2	2	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Paper I: Ilmul Qabalat (Obstetrics)

Unit I (1-8)

1. ANATOMY OF FEMALE GENITAL ORGANS. (ZANANA AZA-E- TOLID KI TASHREEH) زنانہ اعجاز تولید کی تشریح

2. FEMALE PELVIS AND ITS DIAMETERS. (ANA KA TAFSILI BAYAN AUR USKE AQTAR) AND FOETAL SKULL AND ITS DIAMETER (JANNEENI RAAS AUR USKE AQTAR) عاہکات فسیلی بیانی اور اسکے اقطار

- 3.OVULATION, FERTILIZATION, IMPLANTATION,(TABVEZ, AMAL-E- BARAWRI, AMAL-E- TANSEEB)تبویض ، عملبرآری ، عملتتصیب
- 4.DEVELOPMENT OF FOETUS.(JANEENI IRTEQA) جنینیارنقاء
- 5.FOETAL CIRCULATION (JANEENI DOARAN-E-KHOON) جنینیدورانخون
- 6.AMNIOTIC FLUID AND FOETAL MEMBRANES (RATOOBAT-E-AMINOOSI WA AGHSHIYAE JANEEN)رطوبتآمنیوسی و اغشیہجنینی
- 7.NORMAL PLACENTA, ABNORMAL PLACENTA. (TABAIEE MASHIMA, GHAIIR TABAI MASHIMA)طبعیاور غیرطبعیمشیمہ
- 8.UMBILICAL CORD, ABNORMALITIES OF UMBILICAL CORD. (TABAIEE HABLUSSURAH, GHAIIR TABAI HABLUSSURAH)طبعیاور غیرطبعیحبالسرہ
- 9.

Unit II (9-13)

- 10.PREGNANCY & PHYSIOLOGICAL CHANGES (HAMAL AUR HAMAL KE TABAIEE TAGHAYYURAT)حمل و طبعیتغیرات
- 11.SINGS & SYMPTOMS OF PREGNANCY. (HAMAL KI ALAMAT VA NISHANIYAN)نشانیان و حملکیعلامات
- DIAGNOSIS OF PREGNANCY. (HAMAL KI TASHKHEES)حملکیتشخیص
12. PSEUDOCYESIS (FALSE PREGNANCY) (HAMAL-E- KAZIB) (RIJAA') حمل کاذب رجاء
13. ANTE-NATAL CARE (HAMLA KI NIGAH DASHT)حملکینگہداشت
- 13.FEOTUS IN UTERO & FEOTO PELVIC RELATIONSHIP. (JANEEN, JANEEN WA HAUZ E ANA KE TALUQQAT)جنینا جنینی و حوضعانیکی تعلقات

Unit III (14-15)

- 14.NORMAL LABOR, MECHANISM AND MANAGEMENT. (TABAIEE WAZA-E-HAMAL, MIKANIA VA INTEZAMIA)طبعیوضعمہلمیکانیہ و انتظامیہ
15. ABNORMAL LABOUR AND ITS MANAGEMENT (GHAIIR TABAIEE WAZA-E-HAMAL AUR UNKE INSARAM INTEZAMAT)غیرطبعیوضعمہلاورانکی انتظامات

Unit IV (16-18)

16. ABNORMAL PRESENTATIONS (GHAIIR TABAIEE TATREEQAT)غیرطبعیتطریقات
- 17.TWINS & MULTIPLE PREGNANCY (HAMAL -E- TAWAM VA HAMAL-E-ADEED)حملتوام و حملعید

18. CONTRACTED PELVIS. (MUNQABIZ ANA) منقبضعانه

Unit V (19-21)

19. MEDICAL, SURGICAL AND GYNECOLOGICAL DISORDERS IN PREGNANCY

Hypertensive Disorders in Pregnancy, Epilepsy, Anaemia, Heart Diseases, Thyroid Disorders, Renal Disorders, Fevers, Viral infections, Tuberculosis, Rh Isoimmunization, Hyperemesis gravidarum, constipation, Haemorrhoids, oedema, pruritus vulva, insomnia, Varicosity, Jaundice, Diabetes Mellitus, Nephritis

20. OBSTETRIC DISORDERS IN PREGNANCY

- Abortion. (Isqat) اسقاط
- Ectopic pregnancy. (Hamal Kharij ure Reham) حمل خارج الرحم
- Intra Uterine Growth Retardation (IUGR) ائییو جیار
- Oligohydramnios. (Qilatte Mae Amniosi) and Polyhydramnios. (Kasrat-e-Mae Amniosi) قلتماء آمنیو سیکٹر تماء آمنیو سی
- Ante Partum Haemorrhage. (Jiryān-uddam Qablulwiladat) جریانا الدم قبل ولادت
- Post-Partum Haemorrhage. (Jiryān-uddam Badulwiladat) جریانا الدم بعد الولادة
- Gestational and Trophoblastic Diseases

21. PRETERM LABOR (Muajjal, Wiladat qabluzwaqt), PRETERM RUPTURE OF MEMBRANE (Inshiqaaqeghishae janeen qabluzwaqt), POST MATURITY, INTRA UTERINE FETAL DEATH (FAUT E JANEENI) فوتجنینی

Unit VI (22-28)

22. NORMAL PERPUERIUM AND ITS MANAGEMENT (ZAMAN-E- NIFAS AUR USKE AWAREZAT) زمانہ نفاس اور اسکے عوارجات

ABNORMAL PUERPERIUM AND ITS MANAGEMENT (GAIR TABAIEE ZAMANE NIFAS)

23. OBSTETRICAL PROCEDURES & OPERATIONS.

- Version (Gardish) گردش
- Episiotomy (Qata-ul- Ejaan) قطع عجان
- Forceps and Vacuum Delivery. ملقظیو جمعہل
- Caesarean Section (Shigaaf-e-Qaisree) شگافقیصری
- Destructive operations (Takhreesi Dastkariya) تخریبی دستکاریاں

24. ASSESSMENT OF FETAL WELBEING (Foetal surveillance)

25.DRUGS IN PREGNANCY

26. NEONATAL CARE (NAUZADA KI NIGHAHDASHT)نگهداشتنو مولود

- Normal neonate
- Breast Feeding (Raza'at)رضاعت
- Immunization Schedule (ManaatiKhaka)مناعتیخاکه
- Premature Neonates
- Postmature Neonates

27.NEONATAL DISEASES

- Asphyxia Neonatorum (Habs-e-Tanaffus)حبستنفس
- Ophthalmia Neonatorum (Aashob-e- Chashme Naumaulood)آشوبچشمنو مولودی
- Icterus Neonatorum (Yarqanenaumaulood)یرقاننومولودی
- Convulsions (Tashannuj)تشنج
- Congenital Syphilis (KhalqiAatshak)آتشکخلفی
- Neonatal diarrhea(Ishalenaumaulood)اسهالنومولودی

28.CONGENITAL ANOMALIES OF NEWBORN

- Hydrocephalus (Ma ur Raas)ماءالرأس
- Anencephaly (Adam-e- Dimagh)عدمدماغ
- Microcephaly (SighrudDimagh)صغردماغ
- Down Syndrome (Elamia)ڈاؤنکاءعلامیہ
- Congenital Heart Diseases (C. H.D.)خلقیامراضقلب

JUZ E AMLI (PRACTICAL) OBSTETRICS

- History taking and examination of a pregnant woman (15 cases)
- Non stress testing of fetus; biophysical scoring of fetus
- Monitoring and conduct of a normal labour
- Intrapartum fetal surveillance. Charting partograph
- Induction of labour, amniotomy
- Management of third stage of labour, prevention and treatment of post partum hemorrhage
- Witness caesarean section, breech delivery, forceps and vacuum delivery

- Essential care of a newborn
- Postpartum care
- Putting notes of delivery, an abortion, taking consent

Operative Skills

- Observe of normal delivery on manikins and simulators
- Making and repair of episiotomy on simulators
- Insertion and removal of intrauterine device, postpartum insertion of intrauterine contraceptive device
- Observe and assist minilab tubal ligation (Under supervision)
- Catheterization
- Drawing blood sample line
- Initiating an intravenous tube
- Managing nasogastric tube
- Management of hemorrhagic
- Stitch removal
- Pelvic examination during labor
- Intramuscular injections
- Universal precautions

Paper II: Amraz e Niswan (Gynaecology)

Unit I (1-7)

1. TASHREEH AZA-E-TANASULYA-WA-GHAIR TABAI SHAKLEIN (ANATOMY OF FEMALE GENITAL ORGAN & MALFORMATION OF GENITAL TRACT)
2. TASHREEH E SADDIYEIN (ANATOMY OF BREAST)
3. AFAAL-E-AZA- E TANASULYA (PHYSIOLOGY OF GENITAL ORGAN)
4. MAREEZ KE SABIQA HALAAT WA ISTAFSARAAT (HISTORY TAKING AND CLINICAL EXAMINATION)

5. BALOOGHAT (PUBERTY)
6. INQATA E TAMS (MENOPAUSE AND ITS RELATED PROBLEMS)
7. TABAI IDRAR-E-TAMS AUR NIZAAM-E- LAQANAATI (PHYSIOLOGY OF MENSTRUATION AND ENDOCRINE SYSTEM)

Unit II (8)

8. FATOORAT-E-TAMS (MENSTRUAL DISORDERS)
 1. Ahtabaas-e-Tams (Amenorrhoea)
 2. Tams Makhfi or Tams Kazib or Haiz –e- Makhfi (Cryptomenorrhoeal)
 3. Usar-e-Tams (Dysmenorrhoea)
 4. Qillat Tams (Oligomenorrhoea)
 5. Tahtut Tams (Hypomenorrhoea)
 6. Taadud-e-Tams (Polymenorrhoea)
 7. Kasrat-e-Tams (Menorrhagia)
 8. Istehaza (Metrorrhagia)
 9. Nazaf-ur-Reham usrul-Wazeefi (Dysfunctional uterine Bleeding D. U. B.)
 10. Nazaf-ur-Reham bad inqata e Tams (Post-Menopausal Bleeding)

Unit III (9-10)

9. AMRAZ-E-FURJ (DISEASES OF VULVA)
 - Hikkat-ul-Furj (Pruritus Vulvae)
 - Jarab-ul-Furj (Scabies of Vulvae)
 - Qurooh-ul-Furj (Ulcers of Vulva)
 - Izmul-Bazar (Enlargement of clitoris)
 - Iltihab –e- Furj (Vulvitis)
10. AMRAZ-E-MEHBAL (DISEASES OF VAGINA)
 - Iltihab-e-Mehbal (Vaginitis)
 - Qurooh-e-Mehbal (Ulcers of Vagina)
 - Istarkha-e-Mehbal (Atony of Vagina)
 - Khurooj-e-Mehbal (Prolapse of Vagina)
 - Tashannuj-e-Mehbal (Vaginismus)
 - DaweerawaSulaat-e- Mehbal (Cyst and Tumours of Vagina)

Unit IV (11-14)

11. AMRAZ-E-REHAM (DISEASES OF UTERUS)

- Iltihab-e-Unaq-ur-Reham (Cervicitis)
- Ta' akkul-unaq-ur-Reham (Cervical Erosion)
- Sulaat-e-unaq-ur-Reham (Tumours of cervix)
- Iltihab-e-Reham (Inflammation of Uterus)
- Mailan-ur-Reham (Version of Uterus)
- Aujaj-ur-Reham (Flexion of Uterus)
- Inzalaq-e-Reham or Khurooj-e-Reham (Prolapse of Uterus)
- Inqalab-e-Reham (Inversion of Uterus)
- Sulaat-e-Reham (Pyometra)
- Ijtama-e-Sadeed-e-Reham (Rupture or perforation of Uterus)
- Inshaq-e-Reham (Morbidity of Uterus)
- Sua-e-Mizaj-e-Reham (Abnormal Temperment of uterus)

12. AMRAZ-E-QAZAFAIN-WA-KHUSYATUR-REHAM ((DISEASES OF THE FALLOPIAN TUBES AND OVARIES)

- Iltihab-e-Qazafain (Salpingitis)
- Istasqa-e-Qazafain (Hydrosalpinx)
- AmbubiIjtama-e-Sadeed (Pyosalpinx)
- AmbubiMubeeziKhuraj (Tubo-ovarian abscess)
- Iltihab-e-Khusyatur-Reham (Oophoritis)
- Inzilaq-e-Khusyatur-Reham (Prolapse of ovaries)
- Daweera-wa-Sulaat-Khusyatur-Reham (Cyst and tumours of ovaries)

13. SAILAN-UR-REHAM WA GHAIR TABAIEE AFRAZAAT E MEHBAL (EXCESSIVE AND ABNORMAL VAGINAL DISCHARGE)

14. UQR OR AQR (INFERTILITY)

Unit V (15-20)

- 15. AZA-E-TANASULYA KE-ZARBAAT (INJURIES OF GENITAL TRACT)
- 16. AZA-E-TANASULYA-KE-NAASOOR (GENITAL TRACT FISTULAE)
- 17. ILTISAQ WA TAZAYYUQ-E- AZA-E-TANASULYA (ADHESIONS & ATRESIA OF GENITAL TRACT)
- 18. DAROON – E- REHMIYAT (BATAN-E-REHMIYA (ENDOMETRIOSIS)
- 19. AMRAZ E MANQOOLA JINSIA OR AMRAZ--E-ZUHRAVIYA (SEXUALLY TRANSMITTED DISEASES)

- Qarah-e-Rakhv (Soft Sore or Chancroid)
 Aatshak (Syphilis)
 Suzaak (Gonorrhoea)
 Chlamydial infection
 Trichomoniasis
 Illat-QillatManaat-E-Maksooba (IQMEM) (HIV and AIDS)
 HSV (Herpes Simplex Virus)
 HPV (Human Papilloma Virus)
 Lympho granuloma Inguinale,Granulomavenerum
20. TADARUN-E-AZA-E-TANASULYA (GENITAL TUBERCULOSIS)

Unit VI (21-26)

21. LAYYAN UL IZAAM (OSTEOMYELITIS).
22. JINS WATAGHAYYURAT-E-BAIN-UL-JINS (SEX & INTERSEXUALITY)
23. AMRAZ-E-NISWAN MEIN HOMONE SE ILAJ (HORMONE THERAPY IN GYNAECOLOGICAL DISORDERS)
24. KHANDANI MANSOoba BAND (FAMILY PLANNING & CONTRACEPTIVE MEASURES)
25. TASHKHEESI WA MOALIJAATI AMALYAAT (DIAGNOSIS AND THERAPEUTIC PROCEDURES)

Hormone Assay

Screening procedures (VIA, Ciller's test, Pap's Smear, HVS etc)

Imtihaan –e- Khalvi (Cytological examinations)

Imtihaan-e-Naseej-e- Marzi (Histopathological examinations)

Qaisar-e-Batan (Laprotomy)

Batan Beeni (Laparoscopy)

Batan Beeni hamrahRangbeeni (Laparascopy with dye instillation)

HawaiAmboobNigari(Tubal insufflation Test)

Shigaaf-e- Reham (Hysterotomy)

Ambubi- rehamNigari (Hysterosalpingography)

Reham Barari (Hysterectomy)

SalaaLeefiRehmiBarari (Myomectomy)

IttasawaIjtaraafa (Dilatation and Curettage)

Imaging Techniques in Gynaecology(Ultra Sonogram C.T.Scan, X-rays and

Magnetic Resonance Imaging)

26. AMRAZ-E-SADDIYAIN (DISEASES OF BREAST)

Imtehaan-e- Saddiyain(Breast Examination)

Iltihab-e-Saddiyain (Mastitis)

Khuraj-Saddi (Breast Abscess)

Daweera-wa-Sulaat-e-Saddi (Cyst and tumours of Breast)

JUZ E AMLI (PRACTICAL) GYNAECOLOGY

- History taking and examination of a pregnant woman (15 cases)
- Tutorial on Breast Self-Examination (BSF)
- Making of pap smear, wet smear preparation on vaginal discharge, conducting visual inspection after application of acetic acid (VIA)
- Observe and assist minor gynecological procedures
- Observe and assist insertion and removal of intrauterine contraceptive device
- Family counselling and Application of Contraceptive device

Reference Books:

1. *Authors (year), Title of the Book, Edition, Publishers, Place of Publication, Page Nos.*
2. *Dutta's DC(2015), Textbook of Obstetrics, 9th Edition, Jaypee Brothers, New Delhi.*
3. *Padubidri VG, Shirish(2004) ND. Shaw's Textbook of Gynaecology 13th edition, Elsevier India.*
4. *Malhotra. N, (2015) Jeffcoat's Principles of Gynaecology, 8th edition, Jaypee brothers, New Delhi*
5. *Baker P.N, Kenny L.C, Obstetrics by Ten Teachers, 19th edition, Hodder Arnold, An Hachette UK Company.*
6. *Baker P.N, Kenny L.C, Gynaecology by Ten Teachers, 19th edition, Hodder Arnold, An Hachette UK Company.*
7. *Amrze-Niswan, Prof. Suhail Fatima,*
8. *Rahbar, Dr. Hamida Aquil*
9. *Dawn C.S, Textbook of Obstetrics, Neonatology & Reproductive & Child Health Education ,16th edition; Kolkata*
10. *Razi ABZ, Kitabul Hawi, Vol 9 New Delhi, CCRUM; 2001.*

11. Gupta S, A Comprehensive Textbook of Obstetrics & Gynaecology.2001, New Delhi; Jaypee Brothers.

Teaching-Learning Strategies in brief (4 to 5 sentences)

Core educational contents like books and lectures both offline and online, group-discussions, classroom interactions open-ended study questions etc are carefully balanced to adjust course curricula. Teaching learning process is designed to create a collaborative opportunity for analyzing, problem solving, summarizing, and using visual or verbal descriptions to explain complex medical concepts in a simple manner in the classroom.

Practical training methods include history taking & examination in OPD, description on simulator on physical as well as e-simulator, Models & Chart, Bedside examination, Indoor teaching, Instruments explanation. And posting in the Hospital in OPD and IPD

Assessment methods and weightages in brief (4 to 5 sentences)

Based on the guidelines of the NCISM, Govt of India

Paper I 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)

Paper II 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)

In theory examination term courses will be assessed in sessional exams by;

Written exams, Assignments, Presentations etc.

Practical 100 Marks Sessional(1,2 and 3 =25 marks in best of two to be counted)

Term exams for practical will be based on Viva-voce of the term course, Bedside practical and their record maintenance, Preparation of Charts and identification of Instruments and Models.

Course Code:UNIUG-IJ (BUM 405 A&B)

Title of the Course:Paper 1= *Jarahat Umoomi*, Paper II=*Jarahat Khusoosi*

L-T-P L=150, P=300, Total=450.12.5 Hrs per Unit.

(L=Lecture hours, T=Tutorial hours, P=Practical hours).

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Understanding the basic concept of surgery as per the Unani medicine and modern contexts.

CLO-2 **Apply** unani principles, skills as well as current medical knowledge, diagnostic tools and techniques for making diagnosis, treatment and prevention of diseases

CLO-3 **Analyse** the surgical procedure on the basis of Unani and modern concepts.

CLO-4 **Develop** the extra interest for higher studies in the field of surgery.

CLO-5 **Utilize** the modern tools and techniques for surgical procedures.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CLO1	3	3	3	3	3	3	2	2	2	2	2	2	2	2	3	1
CLO2	3	3	2	3	3	2	3	2	2	3	3	2	3	2	3	2
CLO3	3	3	2	2	1	2	2	2	2	3	2	2	1	3	2	3
CLO4	2	1	1	3	2	1	1	3	1	1	1	3	2	3	3	2
CLO5	3	3	3	2	2	2	2	2	2	3	2	2	3	2	1	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

JARAHYAT (SURGERY) SYLLABUS

Paper – I Jarahiyat Aamma (General Surgery)

Unit 1: 1. Tareekhi Khaka (Historical aspects)

2. Iltihab (Inflammation):

- Mahiyat (Pathology)
- Asbaab (Causes)
- Darjabandi (Classification)
- Alamaat (clinical features)

- *Awarizat* (complications)
- *Ilaaj* (treatment)

3. Jarahat (Wounds):

- *Darjabandi* (Classification)
- *Alamaat* (Clinical features)
- *Usoole Ilaaj* (Principles of treatment)

Unit 2: *Ta'diya* (Infection):

a) *Tadiya umoomi* (General Infection):

Taffunuddam (Septicaemia), *Tasmmumuddam*(Toxaemia), *Taqihuddam* (pyaemia),
Jaraseemuddam (Bacteraemia)
Aam advia ki tajweez (General prescription of the Unani and Allopathic drugs).
Jaraseemekush (Antibiotics),
Vairoosikush (Antiviral),
Phaphoond kush (Antifungal)

b) *Ghair nauvi tadiya* (Non specific infection):

Itihabe khalvi (Cellulitis), *Kharaj aur Aqsaam* (Abscess and its types), *Dubaila*
(Boils), *Busoo* (Carbuncle), *Shabe chiragh* (Erysipelas), *Hamara* (Anthrax),
Kharaje barid (Cold abscess).

c) *Nauvi Tadiya* (Specific Infections):

Soozak (Gonorrhoea), *Atashak* (Syphilis), *Diq* (Tuberculosis), *Kuzaaz* (Tetanus)
Khunnaq (Diphtheria), *Juzaam* (Leprosy), *AQMA* (AIDS), *Daul feel* (Filariasis)

Unit 3: 1. ***Majri* (Sinus) and *Nasoor* (fistula)**, *Qurooh* (Ulcer), *Ghangharana* (Gangrene),

Dauzzaheb (Lupus Vulgaris).

2. ***Harq wa salq* (Burns and Scald),**

Darjabandi (classification)

Alamaat (clinical features),

Awarizat(complications)

Ilaaj (treatment),

Jildi Tateem (Skin grafting) and its types, process of healing, *Usoole Ilaaj* (principles of treatment).

3. ***Sal'aat* (Tumours) and *Akyas* (Cysts):**

Darjabandi (Classification),

Alamaat (Clinical features),

Usoole Ilaaj(Principles of treatment),

4. *Nakhoon ke umoomi Amraaz* (Common diseases of nail)

5. *Tawazune Sayyalaat wa Namkiyat* (Fluids and electrolyte balance), *Tawazune*

Hamz wa isaas (Acid-Base balance),

Ghair mewi taghziya (Parenteral nutrition).

6. *Jaryanuddam (Haemorrhage), Sadma (Shock), Darjabandi* (classification)

Alamaat (clinical features),

Awarizaat(complications)

Ilaaj(treatment),

Unit 4: 1. **Intiqaluddam (Blood transfusion)** Mazhar zaroorat (Indications)

Ijtima (Collection)

TareeqaeIntiqal (Method of transfusion)

Awarizaat (Complications) *aur unka Ilaaj* (and their treatment)

2. **Amale takhdeer (Anaesthesia):**

(a) *Tarikhi Khaka* (Historical aspect)

(b) *M'uaina qable takhdeer* (Pre-anaesthetic assessment) and *Istimaale Advia qable takhdeer* (pre-anaesthetic medication)

(c) *Aqsaame Amale takhdeer* (Types of anaesthesia)

i. *Amale takhdeer umoomi* (General Anaesthesia).

ii. *Amale takhdeer Aqalimi* (Regional Anaesthesia)

(iii) *Amale takhdeer nukhaee* (Spinal Anaesthesia)

(iv) *Amale takhdeer Bairoone jafiya* (Epidural anaesthesia)

(v) *Amale takhdeer muqami* (Local Anaesthesia)

Mundarja bala amale takhdeer ke tariqa kar, mustamil advia, ifadiyat wa awarizat aur unka Ilaaj (Methods/procedures of above mentioned types of anaesthesia, drugs I anaesthetic agents, benefits, complications and management.)

Unit 5: 1. **Huboot Ilaaj Qalb wa Riya (Acute Cardio-Pulmonary Resusciation)**

2. **Masnueei amale tanaffus (Artificial Respiration)**

3. **Ilaaj bit Tasneem (Oxygen Therapy)**

4. **Ilmul Azaam wa mafasil (Orthopedics):**

a) **Tarikhi Khaka (Historical aspect)**

Ta'reef (definition) and umoomi bayan (general description)

b) **Kasr (Fractures):**

- (i) *Umoomi bayan* (General description), *Darjabandi* (classification), *Alamaat* (clinical features), *Awarizat* (complications), *Ilaaj* (treatment),
- (ii) *Balae atraf ke kusoor*, *Kasre tar'qua*, *Uzd*, *Zanade ala wa asfal*, *Izame mashtul yed*, *Izame rasghul yed* (Fracture of bones of upper limb and its management: clavicle, humerus, radius and ulna, metacarpal bones and carpal bones.)
- (iii) *Zereen atraaf ke kusoor aur unka Ilaaj*, *Aana*, *Qasbae Kubra*, *Qasbae Sughra*, *Mushtul qadam wa Rusghul qadam*, *Azmul Fakhaj*, & *Raz'fa* (Fractures of bones of lower limb and its management: Pelvis, tibia and fibula, tarsal and metatarsal bones Femur and patella)
- (iv) *Kasre umudul fuqrat* (Fracture of the spine)
- (v) *Kasre fakke aala wa asfal* (Fracture of Jaws)

(c) Khala aur uska Ilaaj (Dislocations and its management)

- (i) *Bala'ee atraaf* (Upper limb)
- (ii) *Zereen atraaf* (Lower limb)
- (iii) *Khurooje qurs bainul fuqrat* (Inter-vertebral disc prolapse)

(d) Irqunnasa (Sciatica syndrome)

(e) Amraaze Azam wa mafasil (Diseases of the bones and joints):

- (i) *Iltihabe mukhul azam aur uske aqsaam* (Osteomyelitis and its types): *Sadidi* (pyogenic), *diqi* (Tubercular) and *atishaki* (syphilitic)
- (ii) *Iltihabe mafasil wa aqsaam* (Arthritis and its types)
- (ii) *Tadarrune fuqrat* (Tuberculosis of spine)

Unit 6: 1. Amraaze istihala (Metabolic disorders):

- (i) *Kusah* (Rickets)
- (ii) *Layyanul Izam* (Osteomalacia)
- (iii) *Niqris* (Gout)
- (iv) *Tahajjurul mafasil* (Osteoarthritis), *Hudari Wajaul mafasil* (Rheumatoid arthritis)
- (v) *Takhalkhul Izam* (Osteoporosis)

2. Salaatul Izam (Tumors of bones)

- i) *Salaate mehmooda* (benign tumors)
- ii) *Salaate khabisa* (malignant tumors)

3. Zarbe ansaja layyan wa Ilaaj (Soft tissue iniuries and its management):

- (i) *Zarbe Azlaat* (Injury of muscles)
- (ii) *Altawae Azlaat* (Sprain of muscles)

- (iii) *Rabataat, Awtar wa lafaif ke amraaz ka umoomi bayan* (General description of diseases of muscles, ligaments and fasciae)

PAPER – II JARAHİYAT KHUSOOSI (SYSTEMIC SURGERY) - THEORY

Unit 7: 1. Raas (Head):

- (i) *Zaaheri aur baatni zarbat* (External and internal injuries)
- (ii) *Kasoore Jamjama* (Fractures of skull bones)
- iii) *Zarbaate Dimagh* (Injuries of Brain)

2. Sadar (Thorax):

- (i) *Zaheri aur baatni zarbate Sadr aur inka intezam* (External and internal injuries of thorax and their management).
- (ii) *TaqeehusSadr* (Empyema)

3. Mari (Oesophagus)

- (i) *Irtadale Medi Mari* (GORD)
- (ii) *Ajsame Ghareeba Mari* (Foreign body in Oesophagus)

4. Batan (Abdomen):

- (a) *Meda* (Stomach)
- (i) *Iltihabe Meda* (Gastritis)
- (ii) *Qarahe Meda wa Asna ashri* (Gastric and Duodenal ulcer)
- (iii) *Sartaane Meda* (Carcinoma of stomach)

5. Ama'a (Intestine):

- (i) *Warne Zaaede Aawar* (Appendicitis)
- (ii) *Tadarrune Ama'a* (Intestinal tuberculosis)
- (iii) *Insidade Ama'a* (Intestinal obstruction)
- (iv) *Taqarruhi Iltihabe Qoloon* (Ulcerative Colitis)
- (v) Crohn's disease
- (vi) *Salaate Mevi* (Intestinal tumors)

Unit 8: 1. Fataq (Hernia)

2. Maqad wa Qanaate Mabraz (Rectum and Anal canal)

- (i) *Inshaqaqe Maqad* (Anal fissure)
- (ii) *Nasoore Maqad* (Fistula-in-ano)
- (iii) *Bawaseer* (Haemorrhoid)
- (iv) *Massae Maqad* (Rectal polyp)
- (v) *Khurooje Maqad* (Prolapse of rectum)

(vi) *Sartaane Maqad* (Carcinoma of rectum)

Unnit 9: 1. Baaretoon (Peritoneum)

(i) *Iltihabe Baaretoon* (Peritonitis)

(ii) *Istisqa* (Ascites)

2. Mirara (Gall Bladder):

(i) *Hisate Mirara* (Cholelithiasis)

(ii) *Iltihabe Mirara* (Cholecystitis)

(iii) *Yarqaane Suddi* (Obstructive Jaundice)

3. Banqaraas (Pancreas):

(i) *Iltihabe Banqaras* (Pancreatitis)

(ii) *Sartaane Banqaras* (Carcinoma of Pancreas)

4. Tihaal (Spleen)

(i) *Azme Tihaal* (Splenomegaly)

(ii) *Zarbe Tihaal* (Injury of Spleen)

(iii) *Qatae Tihaal ke Mawaqe* (Indications of Splenectomy)

Unit 10: 1. Diaphargama (Diaphragm):

(i) *Dubelae Tehtul Diaphargama* (Subphrenic abscess)

2. Kabid (Liver):

(i) *Izme Kabid* (Hepatomegaly)

(ii) *Dubelae Kabid* (Liver Abscess)

(iii) *Kabid ko Muntaqil karne ke Mawaqe* (Indications of Liver transplantation)

Unit 11: Majraae Baul (Urinary tract):

(a) Amraaze Killiya (Diseases of kidney)

(i) *Khalqi badwazae* (Congenital anomalies)

(ii) *Zarbate Majraae Baul* (Injuries of urinary tract)

(iii) *Hisaate Killiya* (Renal Calculi)

(iv) *Akyase Killiya* (Polycystic Kidney)

(v) *Maa'ul Killiya* (Hydronephrosis)

(vi) *Iltihab wa Ijtamae Sadeede Killiya* (Pyelonephritis)

(vii) *Tadarrune Killiya* (Tuberculosis of the Kidney)

(b) Amraaze Masana (Diseases of urinary bladder)

(i) *Iltihabe Masana* (Cystitis)

(ii) *Ojaje Masana* (Diverticulum of urinary bladder)

(iii) *Hisaate Masana* (Vesical calculi)

(c) **Amraaze Majrae baul (Deseases of urinary bladder)**

- (i) *Iltihabe Majrae Baul* (Urethritis)
- (ii) *Tazeeqe Majrae Baul* (Urethral stricture)
- (iii) *Zarbate Majrae Baul* (Urethral injury)

Unit 12: 1. Nizaame Tanaasul (Genital System):

- (i) *Zeeqe Ghalfa* (Phimosis)
- (ii) *Jar Zeeqe Ghalfa* (Paraphimosis)
- (iii) *Sartane Qazeeb* (Carcinoma of Penis)
- (iv) *Iltihabe Aghdeedoos* (Epididymitis)
- (v) *Iltihabe Khusya wa Aghdeedoos* (Epididymo-orchitis)
- (vi) *Qeelaee Maaiia* (Hydrocele)
- (vii) *Qeelaee Damvi* (Haematocele)
- (viii) *Dawali saf'n* (Varicocele)
- (ix) *Khusyon ki khalqi Badwazae* (Congenital anomalies of testes)
- (x) *Salaate Khusya* (Testicular tumour)
- (xi) *Iltihabe Ghuddae Mazi* (Prostatitis)
- (xii) *Izme Ghuddae Mazi* (Benign enlargement of Prostate) (xiii) *Sartaane Ghuddae Mazi* (Carcinoma of Prostate)

2. Saddyain (Breasts):

- (i) *Sadayain ki Khalqi Badwazae* (Congenital anomalies of Breasts)
- (ii) *Iltihabe Saddy* (Mastitis)
- (iii) *Khuraje Saddy* (Breast abscess)
- (iv) *Sala'ate Saddy* (Breast tumors)

PRACTICAL:

PRACTICALS [JUZ-E-AMALI]

Unit 13: *Tareeqae Ta'theer* (Methods of Sterilization), *Shinakht Aalate Jarahiya*

(Identification of surgical instruments), *Aqsaame Khayatata*, *Tareeqe wa mawaad*

(Types of suturing, methods and material), *Darroone wareedi sayyal* (IV fluids).

Unit 14: *Intiqaluddam* (Blood transfusion), *Taseeb* (Dressing), *Huqna* (Enema), *Masnui*

Tanaffus (Artificial respiration), *Oxygen ka istemal* (use of oxygen), *Amle ihtiquan*

(Injection), *Fasad* (Venesection), *Amle Bat* (Aspiration), *Amle Bazl* (Paracentesis).

Unit 15: *Khaz'ae Ansaja* (Tissue biopsy), *Khatna* (Circumcision), *Fat'hulMahbal*

(Meatotomy), *CryoSurgery*, *Barron Banding*, *Qatae Nawaseer* (Polypectomy),

Jarahate Qeela Maa'ya(Operation of Hydrocele), *Mardana Nasbandi* (Vasectomy).

Recanalization, *Anbooba medi anfi ka istemal* (use of Ryle's tube), *Anboobe Maq'adi* (Flatus tube).

Unit 16: *Amle Qasateer* (Catheterization), *Anboobe ikhrajee* (Drainage tube), *Amle Kai* (Cautery), Nail extraction, *Muaina bazarya Tanzeer*, *Amle Taftet wa Laser ki Aam maloomat* (General knowledge of Scopy, Lithotripsy and Laser treatment).

Unit 17: *Mundarja zail Muaina ki Report* (Reporting of the following investigations):

- a) X-ray b) Ultrasonography c) Scanning d) MRI

Reference Books:

1. Authors (year), *Title of the Book*, Edition, Publishers, Place of Publication, Page Nos.

S.N	Author	Title of the Books	Edition	Publisher	Place of Publication	Page Nos.
1	Bailey & Love Edited By Norman S Williams, P.Ronan O'connell, Andrew McCaskie (2017)	Bailey & Love's Short Practice of Surgery	27 th International Student Edition	CRS, Press	Boca Raton, Florida, US	1536
2	S. Das (2008)	A Consise Textbook of Surgery	8 th	Dr. Soman Das, Kolkata	Kolkata	1346
3	Sri Ram Bhat M (2019)	SRB'S Manual of Surgery	6 th	Jaypee Brothers Medical Publishers	New Delhi	1298

4	Rajgopal K. Shenoy (Manipal Manual of Surgery	5 th	CBS Publishers & Distributors	New Delhi	1344
5	Dr. Minhaj Ahmad (2016)	<i>IlmulJarahat</i> Part 1	1 st	Image media publisher & printer, Kolkata	Kolkata	224

2.

Teaching-Learning Strategies in brief (4 to 5 sentences)

The teaching-learning process must constantly overcome the barriers imposed by rapid scientific and technological advances, as well as changes in the profiles of students and access to information. This study intended to analyze the perceptions of students and professors of medical courses of the teaching-learning strategies used in *Jarahat* (Surgery) as well as the factors that influence or hinder the learning of this discipline. Questionnaires were analyzed from 50 students. The teaching strategies most used by *Jarahat* (Surgery) teachers coincided with the classroom activities that students consider to have the greatest contribution to their learning. It was also evidenced that teachers' didactic is considered as a very influencing factor for the students during their learning process, whereas the teachers pointed out daily pedagogical practice as the most relevant factor in the development of their skills within the classroom.

Assessment methods and weightages in brief (4 to 5 sentences)

Paper-A 100 Marks Theory (breakup Sessional I, II and III= 25 Marks in best of two)

1. Paper-B 100 Marks Theory (breakup Sessional I,II And III= 25 Marks in best of two)
2. In theory examination term courses will be assessed in sessional exams by;
Written exams, Assignments, Presentations etc.
3. Practical 100 Marks Sessional I,II and III =25 marks in best of two to be counted

Term exams for practical will be based on Viva-voce of the term course, practical record maintenance, group discussions.

4. Preparation of Charts, identification of instruments used in surgery.

Course Code: UNIUG-AUH (BUM 406) Title of the Course:Ain Uzn Anaf Halaq wa Asnan.

L-T-PL=70, P=140, Total=210

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Understanding the basic concept of Eye & ENT as per the Unani medicine and modern contexts.

CLO-2 **Apply** unani principles, skills as well as current medical knowledge, diagnostic tools and techniques for making diagnosis, treatment and prevention of Eye & ENT diseases.

CLO-3 **Analyse** the Eye & ENT procedures on the basis of Unani and modern concepts.

CLO-4 **Develop** the extra interest for higher studies in the field of ophthalmology and ENT.

CLO-5 **Utilize** the modern tools and techniques for Eye & ENT procedures.

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CLO1	3	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3
CLO2	2	3	2	3	3	3	3	3	2	3	2	2	2	3	2	2
CLO3	2	3	2	2	2	2	2	3	2	2	1	2	3	3	3	2
CLO4	1	2	1	1	2	2	2	2	2	1	1	3	1	2	2	3
CLO5	3	2	2	2	2	2	2	3	2	2	2	2	2	3	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: Amraaze Ain (Diseases of the eye) (7.7HRS/week)

1. *Ain ki tashreeh aur munafe* (Anatomy and Physiology of Eye)
2. *Muainae Ain aur uske mukhtalif tareeqe* (examination of the eye and its various methods)

3. Amaraze ajfaan (Diseases of the eye lids)

- *Iltasaqul jafn* (Symblepharon)
- *Jusatul jafn* (Ankylo blepharon)
- *Sulaq/warme ajfaan* (Blepharitis)
- *Istirkhae jafn* (Ptosis)
- *bar'dah* (Chalazion/ meibomian cyst)
- *Shatra e dakhli wa kharji* (Entropion and Ectropion)
- *Sha're munqalib* (Trichiasis)
- *Sha're zayed* (Districhiasis)

4. Alae damai ke amraaz (Diseases of lacrimal apparatus)

- *Iltihabe ghuddaedamai* (Dacryo-adenitis)
- *Iltihabe keesae damai* (Dacryocystitis)
- *Salae ghuddae damai* (Tumors of the lacrimal gland)
- *Gharb* (Fistula lacrimallis)
- *Dama'a* (Epiphora)

Unit 2: 1. Amraaze mehjareen (Orbital diseases) (7.7HRS/week)

- *Humzul Ain* (Exophthalmos)
- *Sillul Ain* (Atrophy of the eye)

- *Mehjari khalvi iltiḥab* (Orbital cellulitis)

2. Amraaze multehma (Diseases of cornea)

- *Ramade Haad*, (Acute conjunctivitis)
- *Ramade Mausami* (Vernal conjunctivitis)
- *Wadqa* (Phlyctenular conjunctivitis)
- *Zafrah/Nakhuna* (Pterygium)
- *Jarbul Ajfaan* (Trachoma)

3. Amraaze qarniya (Diseases of cornea)

- *Iltihabe qarniya*, haad wa muzmin (Acute and chronic keratitis)
- *Quroohe qarniya* (Corneal ulcer)
- *Iltihabe naseejul qarniya* (Interstitial keratitis)
- *Burooze qarniya* (Kerectasia)
- *Bayaze qarniya* (Corneal opacity)
- *Zarabul qarniya* (Contusion of cornea)

Unit 3: 1. Amraaze Inabiya (Diseases of iris) (7.7HRS/week)

- *Iltihabe Inabiya* (Iritis)
- *Iltihabe jisme hadbi* (Iridocyclitis)
- *Zeeqe Hadqa* (Miosis)
- *Ittasae Hadqa* (Mydriasis)
- *Zaraqul Ma* (Glaucoma)

2. Amraaze Tabqae Masheema (Diseases of choroid)

- *Iltihabe tabqae masheema* (choroiditis)
- *Tabqae masheema ka lahmi salaa* (myoma of the choroid)

3. Amraaze shabkiya (Diseases of Retina)

- *Iltihabe shabkiya* (Retinitis)

Unit 4: 1. Amraaze Adasa (Diseases of Lens) (7.7HRS/week)

- *Nuzoolul ma* (Cataract)

2. Amraaze Basarat (Visual Disorders)

- *Qareeb nazri* (Myopia)
- *Baeed nazri* (Hypermetropia)
- *Basare sheikhookhat* (Presbyopia)
- *Khalale basar/sudad nazri* (Astigmatism)
- *Zoefe basar* (Amblyopia)
- *Isha/shabkori* (Night blindness)
- *Jahar / Rozkori* (Day blindness)
- *Hewal* (squint)
 - *Fisharuddam ke Aankh par asraat* (Effects of hypertension on eye)
 - *Ziabitus shakri ke Aankh per asraat* (Effects of diabetes mellitus on eye)
 - *Qazaul chashm* (Foreign body in the eye)

Unit 5: UZN (EAR) (7.7HRS/week)

1. *Uzn ki Tashreehe umoomi, Munafe wa Mikaniyate Sama'at*
(Anatomy, Physiology of Ear & Mechanism of Hearing)
2. *Muainae Uzn* (Examination of Ear)

3. *Behrapan* (Deafness)
4. *Wajaul Uzn* (Otagia)
5. *Iltihaabe Uzn wasti sadeedi haad* (Acute suppurative otitis media)
6. *Iltihaabe Uzn wasti sadeedi muzmin* (Chronic suppurative otitis media)
7. *Iltihab Sudgi Hulmi* (Mastoiditis)
8. *Taneen wa Dawi* (Tinnitus)
9. *Qulaul Uzn* (Otitis Externa)
10. *Qazaul Uzn* (Foreign Body in the Ear)
11. *Wasaq* (Wax)

Unit 6: ANAF (Nose) (7.7HRS/week)

1. Tashreeh wa Munafe wa Mekaniyate Sham (Anatomy, physiology of Nose and mechanism of olfaction).
2. Moainae Anaf (Examination of Nose)
3. Iltihabe Anaf Haad (Acute Rhinitis)
4. Illtihaabe Anaf muzmin (Chronic Rhinitis)
5. Iltihab Tajaweefe Anaf aur uski aqsaam (Sinusitis & its classification)
6. Fasade Sham (Disorder of olfaction)
7. Busoor wa Qurooh (Nasal Boils & Ulcers)
8. Bawaseere anaf (Nasal polyp)
9. Ru'af /Nakseer (Epistaxis)
10. Munharif fasile Anaf (Deviated nasal septum)
11. Qazaul Anaf (Foreign body in the Nose)

Unit 7: Halaq (Throat) (7.7HRS/week)

1. Halaq ki Tashreeh umoomi wa Munafe (Anatomy & Physiology of Throat)
2. Muaenae Halaq (Examination of Throat)
3. Amraaze Halaq (Diseases of Throat)
4. Iltihabe Balaum (Pharyngitis)
5. Usrul Bala (Dysphagia)
6. Iltihabe Lauzatain (Tonsillitis)
7. Khuraje Atrafe Laozatain (Quinsy)
8. Iltihabe Hanjarah (Laryngitis)

Unit 8: *Jaufe Fam ki tashreeh wa munafe* (Anatomy & physiology of Oral Cavity)

Muaenae Fam (Examination of Oral Cavity)

Lisan (Tongue) (7.7HRS/week)

1. *Lisan ki Tashreeh wa Munafe* (Anatomy & Physiology of Tongue)
2. *Moainae Lisan* (Examination of Tongue)
3. *Iltihabe Lisan* (Glossitis)
4. *Iltihabe Shift* (Cheilitis)
5. *Busoor wa Qurooh Shiftain* (Herpes Labialis)

Unit 9: *Asnaan wa Lissa (Teeth and Gums) (7.7HRS/week)*

1. *Tashreeh wa Munafe Asnaan wa Lissa*(Antomy & Physiology of Teeth and Gums)
2. *Muainae Asnan wa Lissa* (examination of Teeth & Gums)
3. *Amraaze Asnan wa Lissa* (Diseases of Teeth and Gums)
4. *Wajaul Asnan* (Tooth ache)
5. *Takkulul Asnan* (Dental carries)
6. *Taqayyuhul Lissa* (Pyorrhoea)
7. *Iltihabe Lissa* (Gingivitis)

PRACTICAL:

PRACTICALS IJUZ-E-AMALI

Unit 10: *Moainae chashm umoomi* (General examination of eye)

1. *Moainae Ajfan, Multahma, Quroohe Qarnia, Hadqa* (Examination of Eye lids, Conjunctiva, Eye ball, Cornea and Pupil)
2. *Ankh ke androoni dabao ka moaina* (examination of intraocular pressure)
3. *Imtihane naqaise inetaf* (Examination of refractive errors).
4. *Alaate Ain ki pehchan aur mawaqe istemal* (Demonstration of ophthalmic instruments and their uses)

Unit 11: 1. *Roodade marz* (10 patients Case-sheets to be prepared).

2. *Alaat ke khake me mawaqe istemal* (Records of diagrams of Ophthalmic instruments and their indication, 10 sheets)

Unit 12: 1. Examination of External Ear

2. Hearing Test
3. Otoscopy

Unit 13: Demonstration of anterior and posterior Rhinoscopy.

Unit 14: Examination of Tongue, Teeth and Buccal cavity.

Unit 15: Students should prepare clinical records of minimum 10 patients and record of ten ENT instruments.

Reference Books:

1. Authors (year), *Title of the Book*, Edition, Publishers, Place of Publication, Page Nos.

S.N	Author	Title of the Books	Editi on	Publisher	Place of Publicatio n	Page Nos.
1	A.K. Khurana (2022)	Comprehensive Ophthalmology	8 th	Jaypee Brothers Medical Publishers	New Delhi	612
2	R. Sihota & R. Tondon (2019)	Parson's Diseases of the Eye	23 rd	Elsevier	India	636
3	B.M. Chatterjee Edited by L.P. Agarwal (2011)	Handbook of Ophthalmology	6 th	CBS Publishers & Distributors	New Delhi	451
4	Hakim Tariq Akram Siddiqui	<i>Kitabul Ain</i>	1 st	Rashad Publishing House	New Delhi	445
5	PL Dhingra & Shruti Dhingra (2018)	Diseases of Ear, Nose and Throat & head and Neck Surgery	7 th	Elsevier	India	554
6	Mohan Bansal (2021)	Diseases of Ear, Nose Throat	3 RD	Jaypee Brothers Medical Publishers	New Delhi	612
7	Lt Col BS Tuli	Textbook of Ear, Nose & Throat	1 st	Jaypee Brothers Medical Publishers	New Delhi	584

8	Dr. Abdul Bari (2004)	EAR NOSE and THROAT DISEASES	1 st	Aijaz Publishing House	New Delhi	209
9	Dr. Mohammad Arif (2018)	<i>Moalajate Amraze Uzn Anf- o-Halaq with Ilaj Bit Tadbeer</i>	1 st	Self Publication	Bhopal	529

2.

Teaching-Learning Strategies in brief (4 to 5 sentences)

The teaching-learning process must constantly overcome the barriers imposed by rapid scientific and technological advances, as well as changes in the profiles of students and access to information. This study intended to analyze the perceptions of students and professors of medical courses of the teaching-learning strategies used in *Ain Uzn Anf Halaq wa Asnan* (Eye & ENT) as well as the factors that influence or hinder the learning of this discipline. Questionnaires were analyzed from 50 students. The teaching strategies most used by *Ain Uzn Anf Halaq wa Asnan* (Eye & ENT) teachers coincided with the classroom activities that students consider to have the greatest contribution to their learning. It was also evidenced that teachers 'didactic is considered as a very influencing factor for the students during their learning process, whereas the teachers pointed out daily pedagogical practice as the most relevant factor in the development of their skills within the classroom.

Assessment methods and weightages in brief (4 to 5 sentences)

Theory Paper 100 Marks (breakup Sessional I, II and III= 25 Marks in best of two)

1. In theory examination term courses will be assessed in sessional exams by;
Written exams, Assignments, Presentations etc.
2. Practical 100 Marks Sessional I,II and III =25 marks in best of two to be counted
Term exams for practical will be based on Viva-voce of the term course, practical record maintenance, group discussions.
3. Preparation of Charts, identification of instruments used in *Ain Uzn Anf Halaq wa Asnan* (Eye & ENT).

Course Code: UNIUG-AJ Title of the Course: Amraze jild wa Tazeeniyat

L- 70, T- P-140, Total=210

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 To exhibit the fundamental knowledge of Unani dermatology and Cosmetology

CLO-2 To be able to diagnose the different dermatological disorders

CLO-3 To be able to treat different skin conditions through pharmacotherapy, dieto-therapy, and Ilaj bit Tadbeer

CLO-4 To be able to apply contemporary scientific knowledge in cumulation with classical knowledge for the management of dermatological conditions.

CLO-5 To be able to evaluate new treatment regimens in the light of emerging contemporary evidence and based on Unani fundamentals of treatment.

CLO-6 To Create evidence bases medicine vis a vis Unani dermatology and Cosmetology

CLO-7 To provide an alternative to chemical based cosmetics.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	3	3	3	3	2	1	1	1	2	3	2	2	2
CLO 2	3	3	3	3	3	3	3	3	2	2	1	1	3	3	2	2
CLO 3	3	3	3	3	3	3	3	2	3	1	1	1	2	3	3	3
CLO 4	3	3	3	3	3	3	3	3	3	2	2	2	2	3	1	1
CLO 5	3	3	3	3	3	3	3	3	3	1	1	2	2	2	3	3
CLO 6	3	3	3	3	3	3	3	2	3	1	1	2	2	2	1	2
CLO 7	3	3	3	3	3	3	3	2	3	1	1	2	2	2	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: Skin Diseases:

1. Brief anatomy, physiology of skin.
2. Types of skin and its variants.
3. Common signs and symptoms of skin diseases.
4. Skin lesions and its classification:
 - a) Zarar-e-Ibtedayi (Primary lesions)
 - b) Zarar-e- Sanvi (Secondary lesions)
 - c) Zarar-e- Makhsoosa (Special lesions)
 - d) Basoor aur uski aqsaam
5. Basic principle of treatment of skin diseases.
6. Tadabeer of skin diseases.
7. Drugs used in skin diseases and cosmetology.
8. Brief introduction of medical emergencies in dermatology and life-threatening skin disorders.
9. Causes, pathogenesis, clinical features, diagnosis and management of following disease:
 - a) Muta'ddi amraz (Infectious diseases)**
 - Viral diseases: Hasba (Measles), Humaiqa (Chicken pox / Varicella), Judri (Small Pox), Namla aur uski aqsaam (Herpes and its types)
 - Bacterial diseases: Juzam (Hansen's disease), Aatishak (Syphilis), Impetigo, Diqq-ul-jild (TB of Skin), Surkhbada (Erysipelas), Shab chiragh (Carbuncle).
 - Fungal infection: qooba (Dermatophytosis) aur uski aqsaam, Candidiasis
 - Parasitic infection: Jarb (Scabies) aur uski aqsaam, Jildi kalazar (Cutaneous Leishmaniasis), irq-e-madni (Dracunculiasis medinensis), Daa-ul-Feel (Elephantiasis).
 - b) Noninfectious disorders**
 - Basoor-e-labniya (Acne)
 - Naar-e-farsi (Eczema)
 - Iltehab-e-Jild (Dermatitis) and its types
 - Iltehab-e-urooq (Vasculitis)
 - Hikka (Pruritis)
 - Shira'a (Urticaria)
 - Banaat-ul-Lail
 - Hazaz-e-musattah (Lichen planus)

- Daa-us-sadaf (Psoriasis)
- Naffata (Pemphigus) aur uski aqam
- Systemic Lupus Erythematosus (SLE)
- Bad-e-shanam (Acne Rosacea)

c) Disorders of pigmentation

- Fasad-e- laun
- Bars (Vitiligo) aur uski aqam
- Bahaq (Pityriasis) aur uski aqam
- Kalaf (Melasma/Cholasma)
- Barsh (Freckles)
- Namash (Nevus) aur uski aqsaam

d) Abnormal growth of skin

- Sa'leel (Warts)
- Sal,aat (Tumors)
- Sartan-e-jild aur uski aqam (Melanoma, Basal Cell Carcinoma, Squamous cell carcinoma)

e) Others:

- Hasaf (Miliaria)
- Kasrat-e-arq (Hyperhidrosis)
- Qillat-e-Arq (Anhidrosis)
- Arq-e-muntin (Dracantiasis)
- Dubaila/ Khuraj(Abscess)
- Dawali (Varicose Vein)
- Maraz-e-Husaaf (Pellagra)
- Phrynoderma

Unit 2: Diseases of Hair:

1. Types and Variation of hair and its normal cycle.
2. Intishar-e-sha'r (Hair Fall)
3. Da-us-salab & Da-ul-haiya

4. Saa'fa
5. Sal'a (Baldness)
6. Shaib (Premature Graying of Hair)
7. Bafa (Seborrhoea of Scalp)
8. Namoosat
9. Quml o sibyan (Pediculosis)

Unit 3: Diseases of the Nail

1. Abnormal Nail Presentations and its examination
2. Zufra-e-Talqiya (Onychomycosis)
3. Iltehab-e-azfaar /Daakhis (Paronychia)
4. In growing nails

Unit 4: Tazeeniyat (Cosmetology)

1. Tazeeniyat ka umoomi Bayan (General Description of Cosmetology)
2. Jild ka taghziya wa tahaffuz (Nutrition and Care of Skin Health)
3. Azfar ka Taghzia wa Tahaffuz (Nutrition and Care of Nails)
4. Baalon ka taghzia wa tahaffuz (Nutrition and Care of Hairs)
5. Skin ageing and anti-ageing measures
6. Aftab ki shu,aon ke asraat aur us se hifazat ke tareeqe (Effect of sun exposure on skin and its protection)
7. Khushboo'at wa mane-aat-e-badboo (Perfumes/Deodorants)
8. Bleaching and waxing
9. Zeenat-e-jild ke liye umoomi Tadabeer:
 - Hammam & Ghasool
 - Riyazat-e-wajh
 - Inkibab,
 - Zimad, Tila, Ghaza, Ghaliya, Ubtan
 - Missi, Naura (Hair remover)
 - Rooshoya (Fash wash
 - Qashoor (Scrub)
 - Barud,
 - Hina.
 - Surma, kajal, Mascara.

10. Chehre ki nigahdasht ki unani tadabeer
11. Halq-ul-wajh (Facial Epilation), Shaqq-ul-sha'r (Splitting of Hair)
12. Ilaj bil shamoom, Itr (Aromatherapy)
13. Taghseel (Spa therapy)
14. Mane shikan Tadabeer (Anti-wrinkle Procedures)
15. Talawwun-e-sha'r (Herbal Hair Dyes) § Baalon ki zeenat se mutalliq tadabeer (daraz banana, ghunghrale banana, seedha karna, uguna etc.)
16. Tazheel wa Tasmeeen
17. Washam (Tattooing)

Unit 5: Investigations:

1. Wood lamp examination,
2. Diascopy, KOH-Mount test
3. Culture & sensitivity test
4. Skin biopsy
5. Allergens test (patch test, prick test etc.)
6. Lepromin test
7. Cytological test
8. Immunological test
9. Immunoflorescence,
10. ELISA
11. T zank smear.

Unit 6: Procedures:

1. Examination of lesions by magnifying & Electro magnifying lenses,
2. Photo/UV Therapy,
3. Microscopy,
4. Preparation of Slit Smear.

Reference Books:

1. Ibn Sina, Al Qanoon fit Tib (Arabic version). Vol-4. New Delhi: Institute of history of medicine and medical research; 1408 Hijri
2. Nafees. Moalajat Nafeesi. (Arabic). Vol-4. Lucknow: Matba Munshi Naval Kishore; 1324 Hijri.

3. Jamaluddin. Aqsarai (Arabic). Vol-3. Lucknow: Matba Munshi Naval Kishore;
4. Tabari AM. Moalajat Buqratiya (Urdu translation). Vol-2. New Delhi: CCRUM, Ministry of Health and Family Welfare; 1997
5. Zohr I. Kitabut Taisir Fil Mudawat wa Tadbir (Urdu translation). New Delhi: CCRUM, Ministry of Health and Family Welfare; 1986
6. Arzani A. Tibbe Akbar (Urdu translation by Hussain M). Deoband: Faisal Publications; YNM.
7. Arzani A. Mizanut Tib (Urdu translation by Kabeeruddeen HM). New Delhi: Idara Kitabushshifa; 2001
8. Khan A. Ekseer Azam (Farsi). Vol-4. Kanpur: Matba Nizami; 1289 Hijri.
9. Khan A. Romooz Azam (Farsi). 2nded. Vol-1. New Delhi: CCRUM, Ministry of Health and Family Welfare; 2006.
10. Majoosi. Kamilus Sana. (Urdu translation by Kantoori GH). Vol-1. New Delhi: Idara Kitabush Shifa; 2010.
11. Qarshi HM. Hasan. Jamiul Hikmat.Vol-2. New Delhi: Idara Kitabushshifa; 2011.
12. Qaf I. Kitabul Umda Fil Jarahat. (Urdu translation). Vol-1. New Delhi: CCRUM, Ministry of Health and Family Welfare; 1986.
13. Majoosi. Kamilus Sana. (Urdu translation by Kantoori GH). Vol-2. New Delhi: Idara Kitabush Shifa; 2010.
14. Hubul I. Kitabul Mukhtarat Fit Tib. (Urdu translation). Vol-4. New Delhi: CCRUM, Ministry of Health and Family Welfare; 2007.
15. Qurrah SI. Tarjama Zakheera Sabit Ibn Qurrah. (Urdu translation). Aligarh Muslim University: Litho Colour Printers Aligarh; 1987
16. Razi AMBZ. Kitabul Fakhir Fit Tib (Arabic version). Part-1. Vol-1. New Delhi: CCRUM, Ministry of Health and Family Welfare; 2005
17. Razi AMBZ. Alhavi Fit Tib, (Urdu translation). Vol-23. Aligarh Muslim University: Saba Publishers Aligarh; 1994

18. Razi AMBZ. Kitabul Mansoori (Urdu translation). New Delhi: CCRUM. Ministry of Health and Family Welfare; 1991
19. Qamari AM H. Ghina Muna (Arabic version). New Delhi: CCRUM. Ministry of Health and Family Welfare; 2008
20. Ibn Rushd. Kitabul Kulliyat (Urdu translation). 2nded. New Delhi: CCRUM. Ministry of Health and Family Welfare; 1987
21. Ibn Khawas. Mojarrabat Tibb Iskandari. (Urdu translation). New Delhi: CCRUM, Ministry of Health and Family Welfare; 2009
22. Antaki Dawood, Tazkirah Oolil Albab (Arabic version). Vol-3. New Delhi: CCRUM, Ministry of Health and Family Welfare; 2010
23. Sina I. Al-Qanoon Fit-Tibb. (English translation Jamia Hamdard). Vol- I. New Delhi: Jamia Hamdard; 1993
24. Kabiruddin H. Kulliyat-e-Qanoon. (Urdu Translation). Vol-I. New Delhi: Idara Kitabus shifa; 1954
25. Sina I. Al-Qanoon Fit-Tibb (Urdu translation by Kantoori GH). Vol-1. New Delhi: Ejaz Publishing House; 2010:212-214.
26. Khan A. Romooz Azam (Farsi). 2nded. Vol-II. New Delhi: CCRUM, Ministry of Health and Family Welfare; 2006
27. Burge S, Matin R, Wallis D. Oxford handbook of medical dermatology. Oxford: Oxford University Press 198 Madison Avenue; 2011
28. Habif TP. Clinical dermatology. 5th ed. London: Mosby; 2010
29. Menter MA, Ryan C. Psoriasis. 2nd ed. New York: Press Tayor and Francis group; 2014
30. Griffiths CEM., Burns T, Breathnach S, Chalmer R. Rook's text book of dermatology. 9th ed. Vol-1. USA: Jhon Wiley and Sons Ltd; 2016

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Practical demonstration on OPD and IPD patients.
2. Interactive Classroom Teaching.
3. Assignments and group discussions among students and with faculties.

4. Use of online content on subject
5. Sessional and tests on regular basis to evaluate the understanding among students

Assessment methods and weightages in brief (4 to 5 sentences)

Based on the guidelines of the NCISM, Govt of India

1. Paper A 100 Marks Theory (breakup Sessional I, II And III= 25 Marks in best of two)
2. Paper B 100 Marks Theory (breakup Sessional I, II And III= 25 Marks in best of two)

In theory examination term courses will be assessed in sessional exams by;

1. Written exams, Assignments, Presentations etc.
2. Practical 100 Marks Sessional (1,2 and 3 =25 marks in best of two to be counted)

Term exams for practical will be based on

1. Viva-voce of the term course,
2. Laboratory practical and their record maintenance, spotting,
3. Preparation of Charts and identification of histopathological specimen.

**DOCTOR OF
MEDICINE
(MD)
MOALAJAT**

NAME OF THE DEPARTMENT:MOALAJAT

Vision Statement (Department Level):

- Aims to achieve highest standards in teaching, research and healthcare of Unani medicine integrated with latest science and technology for recognition nationally and internationally as the frontrunner in the speciality of Moalajat.

Mission Statements (3 to 4) (Department Level):

- MS 1: Adoption of extensive and innovative clinical training to create competent Unani teachers, academicians and researchers having profound knowledge of Unani medicine coupled with latest medical know-how contributing significantly to health care of community.
- MS 2: Exploiting the vast traditional knowledge and holistic approach of Unani system of medicine through focused and stratified research in thrust areas such as lifestyle disorders, musculoskeletal disorders, liver disorders, immunomodulation, adjuvant therapies conforming to global standards of evidence-based medicine.
- MS3: Continuous upgradation and development of human resources through various specialized courses and training programmes.
- MS 4: To develop collaborations with national and international organizations for interdisciplinary and integrated research and also facilitate international student/ faculty exchange programmes, educational tours etc. for diversification and global exposure.
- MS 5: To make a through various outreach programmes (health camps, health mobile health programs health melas, outreach and awareness programs, telemedicine etc.)

Name of the Academic Program: MD Moalajat

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Academic Programme (MD Moalajat), students will be able to:

QD-1 Demonstrate clinical skills based on in-depth knowledge of Unani medicine coupled with contemporary knowledge for providing promotive, therapeutic, palliative and holistic health care within ethical and medicolegal boundaries.

QD-2 Demonstrate qualities of medical professionalism incorporating teamwork, leadership, interpersonal and communication skills to participate appropriately and effectively in health care system

QD-3 Demonstrate research temperament and skills for carrying out clinical research for validation of classical Unani therapeutics in consonance with global standards of scientific evidence.

QD-4 Demonstrate the ability to be a lifelong learner committed to continuous improvement of skills and knowledge for continuous professional development.

QD-5 Demonstrate ability to work congenially in collaboration with national and international health care institutions that will help maximize the health care delivery potential of Unani medicine.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	3	3	3	2
QD-2	3	3	3	2
QD-3	3	3	2	3
QD-4	3	3	2	2
QD-5	2	3	2	3

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

PROGRAM SPECIFIC OUTCOMES (PSOs)

(In case of specializations in each academic program, 2 to 4)

After completing this Course, the students should be able to:

PSO-1 Elicit and record history from the patient for disease identification, perform a physical examination choose the appropriate diagnostic tests and interpret tests based on scientific validity, cost effectiveness and clinical context. (development of competence in clinical and procedural skills for diagnosis, management of diseases, independent decision making skills

PSO-2 Prescribe and safely administer appropriate therapies, pharmacotherapy and interventions based on the principles of traditional Unani therapy and its scientific validity and demonstrate ability to appropriately identify and refer patients who may require specialized or advanced tertiary care

PSO-3 Development of clinical research protocols, investigating, monitoring, data collection and recording the observations while keeping the essence of Unani fundamentals.

PSO-4 Be a lifelong learner and pursue research in any chosen area of medicine.

PROGRAM LEARNING OUTCOMES (PLOs)

- PLO1: Recognize the importance to the Moalajat specialty in the context of the health needs of the community and the national priorities in the health section.
- PLO 2: Practice the specialty concerned i.e. Moalajat ethically and in step with the principles of Unani medicine.
- PLO 3: Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
- PLO 4: Competence in examination that is complete and relevant to disease identification, diagnosis and management.
- PLO 5: Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature.
- PLO 6: Ability to communicate adequately, sensitively, effectively and respectfully with patients and their families.
- PLO 7: Develop skills in using educational methods and techniques as applicable to the teaching of Unani medical students and health workers.
- PLO 8: Able to hold a position as a member of the health team using his/her clinical skills based on Unani and Modern medical knowledge.
- PLO 9: Acquire basic management skills in the area of human resources, materials and resource management related to health care delivery system.
- PLO 10: Have personal characteristics and attitudes required for professional life including personal integrity, sense of responsibility and ability to show concern for other individuals.
- PLO 11: Prescribe and safely administer appropriate therapies, pharmacotherapy and interventions based on the principles of Traditional Unani drug therapy and scientific validity.

- PLO 12: Diversity of research approaches and research methods relevant to medical and health research, specifically of Life Style disorders.

**Mapping of Program Learning Outcomes (PLOs)
With Qualification Descriptors (QDs)**

	QD-1	QD-2	QD-3	QD-4	QD-5
PLO-1	3	3	2	2	3
PLO-2	3	2	2	2	2
PLO-3	2	3	2	2	2
PLO-4	3	3	2	2	2
PLO-5	2	2	3	3	2
PLO-6	2	2	2	2	3
PLO-7	2	2	2	2	2
PLO-8	3	3	2	3	3
PLO-9	1	2	2	2	2
PLO-10	2	2	2	2	2
PLO-11	3	3	2	3	3
PLO-12	1	2	3	3	2
PSO-1	3	3	2	2	2
PSO-2	3	3	3	3	3
PSO-3	1	1	3	3	3
PSO-4	2	2	3	3	2

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

COURSE DESIGN

Course Code:

Title of the Course: Research Methodology and Biostatistics (Paper I)

L-T-P: L=4, P=0, T=0 (per week)

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

- CLO-1 Develop understanding on basics of research, its various types, objectives of doing research and its significance, research process, research designs and basic terminologies used in research. **[Remember]**
- CLO-2 Planning and designing a clinical research study: critically review the literature for selection of research problem, formulating hypothesis, defining objectives, research subjects, research methodology, tools for conducting research work (especially clinical trials) and analysis of results. **[Understand]**
- CLO-3 Illustrate basic knowledge of use of various types of research designs and their appropriate application in clinical trials: randomization, sampling, controls, blinding etc. **[Understand]**
- CLO-4 Understanding of basic concepts of clinical research, clinical trial definition, and phases of clinical trials, clinical terminology and the significance of statistical analysis in clinical research. **[Understand]**
- CLO-5 Understand significance of ethics in clinical research and related aspects: Ethical committees, Institutional Review Boards, Informed Consent, regulations and policies governing clinical research in human subjects **[Understand]**
- CLO-6 **Development of clinical research documents: clinical trial protocol, SOPs development, informed consent forms and case record form in an integrative manner incorporating traditional Unani knowledge and contemporary science. [Apply]**
- CLO-7 Basic knowledge of different types of data, various methods used for data collection, data processing and analysis in research studies and meaningful interpretation of the data using statistical tests and introduction to common statistical software packages used in clinical research (e.g. SAS, SPSS) **[Remember/ Understand]**
- CLO-8 Demonstrate scientific communication skills in clinical research (writing clinical study reports, research publications, paper writing, concept of plagiarism etc.) **[Apply]**

**Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	1	1	1	1	3	2	2	1	2	1	2	3	2	2	3	3
CLO2	1	1	1	1	3	2	1	2	2	1	2	3	1	1	3	3
CLO3	1	1	1	1	3	2	1	2	2	1	2	3	1	1	3	3
CLO4	2	2	1	1	3	2	2	2	1	1	2	3	1	1	3	3
CLO5	2	2	3	1	3	2	2	2	2	1	2	3	1	2	3	3
CLO6	1	1	1	2	3	1	2	2	2	1	2	3	1	1	3	3
CLO7	1	1	1	1	3	1	2	2	1	1	2	3	1	1	3	3
CLO8	1	1	1	1	3	3	2	1	1	2	1	3	1	1	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (60 Hours)

Types of research

- (a) Literary research
- (b) Clinical research
- (c) Experimental research
- (d) Observation and field studies

· Trends and possibilities of R&D of Unani Drugs

· Research problems

- (a) Definition
- (b) Selection and sources of research problems

· Hypothesis

- (a) Types: Null and alternate hypothesis

· Research designs

- (a) Types of Research designs

· **Controls in research designs**

- (a) Selection criteria
- (b) Placebo and plain control
- (c) Randomization
- (d) Balancing and matching

· **Factors effecting research results.**

UNIT 2 **(60 Hours)**

Tools and techniques in research

- (a) Interview, questionnaire, inventories, scales
- (b) Rating scales

Protocols for research and report writing

- (a) Protocols for experimental, clinical and community based research.
- (b) Writing research report.
- (c) References in research report.
 - (i) Books
 - (ii) Journals
 - (iii) Compendia
 - (iv) Bulletins
 - (v) WHO Reports
 - (vi) Internet Sites

Guidelines for Research

- (a) WHO
- (b) ICMR
- (c) CPCSEA

UNIT 3 **(60 Hours)**

Bio-Statistics

· **Scope and utility of Biostatistics**

· **Descriptive Statistics**

- (a) Analysis of Data
 - (i) Data collection, tabulation and presentation of data.
 - (ii) Measure of central tendency – Mean, Median and Mode.

(iii) Measures of dispersion: Range, quartile deviation, standard deviation.

(b) Probability

(i) Definition and laws of probability

(ii) Types of probability distribution

(iii) NPC and its application size

(iv) Randomized samples

(c) Sampling

(i) Types and sample size

(ii) Randomized sampling

· **Inferential Statistics**

(a) Correlation and linear regression

(i) Karl Pearson correlation coefficient

(ii) Linear regression equations.

(b) Test of significance

(i) 't' test

(ii) 'z' test.

(c) Test of variance

(i) ANOVA one way

(ii) ANOVA two way

(iii) X²

(d) Non-parametric tests

(i) Median test, Mann Whitney U test.

(ii) Kruskal Wallis test, Fried test.

· **Vital Statistics**

(a) Rate and Ratios

(b) Standardization of population

Risk factors

Reference Books:

- Clinical Research Methodology And Evidence Based Medicine by Ajit N Babu, Wolters Kluwer

- C.R.Kothari; Research Methodology Methods and Techniques; 2nd edition; New age international publishers
- Ranjan Das; Biomedical Research Methodology; 1st edition; Jaypee Brother Publishers
- Stephen B Hulley, Steven R Cummings, Warren S Browner, Deborah G Grady, Thomas B Newman; Designing clinical research: Fourth edition; Wolters Kluwer Health/Lippincott Williams & Wilkins
- Evan De Renzo, Joel Moss; Writing Clinical Research Protocols; 1st edition; Academic Press
- David Machin, Peter Fayers; Randomized Clinical Trials: Design, Practice and reporting; 1st edition
- Richard Chin, Bruce Y Lee; Principles and practice of Clinical trial Medicine; 1st edition; Academic Press
- Ranjit Kumar; Research Methodology: A Step-by-Step Guide for Beginners; 3rd edition; SAGE Publications Ltd
- Bernard Rosner; Fundamentals of Biostatistics; 8th edition; Cengage Learning

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
- Practical Training for protocol development and writing
- Inculcation and training of research according to Good Clinical Practices
- Scientific communication: oral and written, report writing etc
- Seminar presentation, teaching-training workshops

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory(25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course: Clinical Biochemistry and Genetics (Paper II)

L-T-P: L=6. T=0, P=2 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Understand the Basic biochemistry and metabolism of carbohydrates, lipids, amino acids and proteins. General characteristics & kinetics assay of clinically important enzymes, vitamins and minerals with their clinical applications in pathogenesis, diagnosis and management of Diseases. **[Remember]**

CLO-2 Understanding the Genetics and its role in the Genetic disorders. The etiopathogenesis, diagnosis and management of Genetic disorders and inborn errors of metabolism. **[Understand]**

CLO-3 **Application of Gene base in the diagnosis of genetic diseases, mutation detection and therapeutic approach through gene therapy. [Apply]**

CLO-4. Demonstrate practical skills of technical procedures of various DNA based diagnostic Probes, Population based DNA testing and mutation detection. **[Apply]**

CLO-5 Demonstrate practical skills of technical procedures of various biochemical parameters for detection, estimation and diagnosis of various disorders. **[Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	2	1	1	2	1	2	2	1	1	2	2	1	2	1	2	1
CLO2	2	1	1	2	1	2	2	2	1	2	2	1	2	1	2	1
CLO3	2	1	1	1	1	1	2	2	1	2	2	2	2	1	2	1
CLO4	1	2	2	2	2	1	1	2	1	2	2	1	2	1	2	1
CLO5	2	2	1	2	1	2	2	1	1	2	2	2	2	1	2	1

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

Clinical Biochemistry and Genetics

UNIT 1 (80 Hours)

Clinical Biochemistry

- Basic chemistry of carbohydrates, lipids, amino acids and proteins.
- Enzymes: General characteristics of enzymes & assay methods kinetics assay of
- some clinically important enzymes.
- Vitamins and minerals.
- Metabolism of carbohydrate lipids and amino acids
- Classification of body fluids and their biochemical co-relation (General considerations)
- Practical (Lab Course)
- LFT, KFT, Sugar profile, Lipid profile.
- Enzyme assays

UNIT 3 (80 Hours)

Genetics

- DNA as Genetic Material: Structure of DNA, Structure of RNA
- DNA Replication, Transcription, Translation
- Mutations : (Basic)
- Chromosomal Abrasions
- Genetic disorders
- Autosomal and sex chromosomal abnormalities

UNIT 3 (80 Hours)

- In-born errors of Carbohydrate, protein and lipid Metabolism (General considerations)
- DNA based diagnosis
- DNA based diagnostic probes
- Population based DNA testing

- Mutation detection
- Gene therapy

Teaching material:

- Lehninger Principles of Biochemistry by David L. Nelson
- Clinical Biochemistry (Lecture Notes) 10th Edition by Peter Rae, Mike Crane , Rebecca Pattenden

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
- Practical Training in OPD and IPD
- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory(25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)
-

Course Code:

Title of the Course: Usoole Tashkhees wa Tajweez ma Jadeed Izafat (Paper III)

L-T-P: L=3, P=9 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

- CLO-1 **Make the provisional diagnosis on the basis of History taking and Examination and adhering to the basics of Unani medicine [Apply]**
- CLO-2 Perform systemic examination of different systems of the body and assess the disease condition its status **[Apply]**
- CLO-3 Analyze the investigations and new techniques of different diseases and establish the diagnosis **[Understand]**
- CLO-4 Perform different clinical procedures like paracentesis, pleural tapping etc. **[Apply]**

- CLO-5 Interact with the patients and their family about the disease condition and follow the ethical guidelines and preserve the privacy of the patient **[Apply]**
- CLO-6 decide the line of treatment and write a prescription specific to the diagnosed disease **[Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	2	3	2	3	3	3	2	2	3	3	2	2	3	3	2	3
CLO2	3	3	2	3	2	3	3	2	3	3	2	2	3	3	2	3
CLO3	3	3	3	3	2	3	3	2	2	3	2	2	3	3	2	3
CLO4	3	3	3	3	2	3	3	2	2	3	3	3	3	3	1	3
CLO5	3	3	3	3	2	3	3	2	3	3	3	2	3	3	3	3
CLO6	3	3	3	3	2	3	3	3	3	3	3	3	2	3	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write ‘3’ in the box for ‘High-level’ mapping, 2 for ‘Medium-level’ mapping, 1 for ‘Low-level’ mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (40 Hours)

Tashkhees ki gharz-o-ghaiyat

Aam Istefsaraat

Rudade Mareez (The History Taking)

- (a) Student’s Approach to the Patient
- (b) History Taking
- (c) General Principles of Examination
- (d) The Case History Recording
- (e) Case Presentation

(f) Interpretation of clinical Data

Umoomi imtehane mareez (General Examination of Patient)

- (a) General appearance
- (b) Mental and Emotional states
- (c) Physical Attitude, gait, physique
- (d) Face, eyes, neck, thyroid gland
- (e) lymphatic system
- (f) Pulse
- (g) Respiration
- (h) Temperature
- (i) Blood Pressure
- (j) Routine Examination
- (k) Assessment of functional Impairment

External Manifestations of Disease

- a) Inspection of Exterior of the body
- b) Abnormalities in Head and Neck
- c) Examination of Mouth, Eye and Ear
- d) Skin, nails and hair and Special Techniques of the examination
- e) Upper limb, lower limb
- f) Genitalia.

Imtehan Nizame Hazm (Examination of Digestive System)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

Imtehan Nizame Tanaffus (Examination of Respiratory System)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations

- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

UNIT 2 **(40 Hours)**

Imtehan nizame Qalb wa Daurane Khoon (Examination of Cardiovascular system)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

Imtehan nizame Baul wa Tanasul (Examination of Urino-Genital system)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj and related assessment scales

Imtehan nizame Asaab (Examination of The Nervous System)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

Imtehan nizame Ezam wa Mafasil (Examination of Skeletal System)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

Imtehane Nafsani (The Psychiatric Assessment)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

Imtehan Ghudade laqanati (Endocrine System)

- (a) Clinical Symptoms
- (b) Examination
- (c) Investigations
- (d) Recent diagnostic techniques
- (e) Usoole Ilaj

UNIT 3 (40 Hours)

Imtehane Mashaikh (Geriatrics)

- (a) Clinical Symptoms
- (b) History Taking
- (c) Examination
- (d) Investigations
- (e) Recent diagnostic techniques
- (f) Usoole Ilaj

Examination of Haemopoietic system

Examination of children

Examination of unconscious patient

Ethical Issues in Medicine

Nabz

- (a) Sharaite Nabz, Tareeqae Imtehan
- (b) Ajnase Nabz
- (c) Nabze Mufrad, Nabze Murakkab
- (d) Asbaabe Nabz
- (e) Nabz ke Tabai Iktelafaat
- (f) Nabz ke Marzi Ikhtelafaat

Imtihan Baul - Nazri

Imtihan Baraaz – Nazri

Usoole Ilaj

- (a) Ilaj ke kulli tareeqe
- (b) Ilaj bil'dawa ke Qavaneen.
- (c) Auram ka usoole Ilaj
- (d) Tareeqae taadil wa tanqiya akhlat
- (e) Qavaneen wa zaraye Istefragh- Ishal, Qai, Idrar, Huqna, Tareeq, Tanfees, Hijamat, Taleeq, Fasd
- (f) Tashkhees na hone ke surat me ilaj

Nuskha naveesi

PRACTICAL

- The students of Moalajat part 1st will be posted at the IPD unit for imparting practical training.
- Case presentation is compulsory for every student
- 3 months posting in I.C.C.U.- For utilization of modern equipments like respirator, monitor, syringe pump, central lines (C.V.P.) in I.C.U, C.C.U & Neuro I.C.U & all modern equipments used in clinical emergencies.

Reference Books:

1. Swash M. Huchison's Clinical Method (Latest Edition), Elsevier Health Sciences
2. Houghton Andrew R. Chamberlains Signs and Symptoms of clinical medicine, published by Taylor & Francis Ltd
3. J. Alastair Innes, Anna Dover, Karen Fairhurst , Macleod's Clinical Examination, Elsevier Health Sciences
4. Kamaluddin Husain Hamdani, Usoole Tib, published by NCPUL, New Delhi
5. Ibn-Sina, Alqanoon Fit Tib (Urdu Translation by Ghulam Hasnani Kantoori), Idara Kitabus Shifa
6. Ismail Jurjani, Zakhira Khawarizam Shahi
7. Harrison's Internal Medicine
8. Davidson's Principles and Practice of Medicine

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion

- Practical Training in OPD and IPD
- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory (25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course: Ilaj Bil Tadbeer (Regimenal Therapy) (Paper IV)

L-T-P: L=3, P=9 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Understand the principles, scope and description of various therapeutic regimenal modalities along with their clinical applications **[Remember]**

CLO-2 Understanding the therapeutic implication of six essential factors and *Tadabeer* (regimens) associated with each factor along with its clinical significance. **[Understand]**

CLO-3 Define aims, objectives, recommendations, types, therapeutic indications, contraindications, adverse effects of various therapeutic modalities with latest scientific updation. **[Remember]**

CLO-4. Demonstrate practical skills of technical procedures of various regimenal modalities on patients for management of diseases. **[Apply]**

CLO-5 Practice Unani Regimenal therapies with competence and integrity in a Health care setting. **[Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	2	2	2	3	1	1	2	2	1	2	2	1	2	2	2	2
CLO2	2	2	2	2	1	1	2	2	2	2	1	1	2	2	2	2
CLO3	3	3	2	3	1	1	2	3	2	2	3	1	2	3	2	2
CLO4	3	3	2	3	1	1	2	3	1	2	3	2	3	3	2	2
CLO5	3	3	3	3	1	1	2	3	1	3	3	2	3	3	2	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (40 Hours)

Introduction, Principles and Scope

- **Concept, objectives and classification**
- **Tadabeer related with Hawa and atmosphere**
- **Tadabeer related with Diet (Ilaj bil Giza)**
- **Tadabeer related with Ilaj Nafsani & Roohani**
- **Geriatric care**
- **Dal'k (Massage)**

- (a) Definition, Principles, Objectives
- (b) Classification of Dal'k
- (c) Description of muscles related to Dal'k
- (d) Properties and action of oils used in Dal'k
- (e) Effects of adjuvant drugs in Dal'k
- (f) Indications and therapeutic uses
- (g) Adverse effects

- **Riyazat (Exercise)**

- (a) Definition, Principles, Objectives

- (b) Classification of Riyazat
- (c) Scientific interpretation and effects of Riyazat in certain disease like Sports induced disease
- (d) Therapeutic importance and indications
- (e) Adverse effects

Hamмам (Bathing)

- (a) Definition, Principles, Objectives
- (b) Types of Hamмам
- (c) Kinds of Hamмам rooms and its importance
- (d) Therapeutic uses and indications
- (e) Adverse effects

UNIT 2 (40 Hours)

· Hajamat (Cupping)

- (a) Definition
- (b) Types
- (c) Sites and procedures of Hajamat
- (d) Indications and contraindications

· Fasd (Venesection)

- (a) Definition
- (b) Sites of Venesection
- (c) Anatomy and Description of Vessels of Venesection
- (d) Instruments used in Venesection
- (e) Pre Venesection Procedure
- (f) Investigations like Hb%, Bleeding Time, Clotting Time, Prothrombin time, platelet count, blood sugar, Blood group with Rh typing
- (g) Procedure and precautions
- (h) Indications and Contraindications
- (i) Management of Post procedural problems.

· Irsale Alaq (Leeching)

- (a) Definition
- (b) Description of Leech and its various types
- (c) Leech collection, storage and preservation
- (d) Leeching procedure

- (e) Precautions
- (f) Indications and contraindications

· **Ishal (Purgation)**

- (a) Definitions, Principles
- (b) Indications and contraindications
- (c) Drugs used for purgation

· **Qai (Emesis)**

- (a) Definition, aims and objectives
- (b) Drugs used for Qai
- (c) Indications and contraindications

· **Idrar (Diuresis)**

- (a) Definitions, aims and objectives
- (b) Indications and contraindications
- (c) Drugs used for Idrar

UNIT 3 **(40 Hours)**

· **Amle Kai (Cauterisation)**

- (a) Definition, Aims, Objectives
- (b) Procedure
- (c) Precautions
- (d) Indications and contraindications

· **Nutool (Douching / Irrigation)**

- (a) Definition, aims and objectives
- (b) Indications and contraindications

· **Huqna (Enema)**

- (a) Definition, principles, aims
- (b) Objectives
- (c) Procedure
- (d) Drugs used in huqna
- (e) Indications and contraindications

· **Tareeq (Diaphoresis)**

- (a) Definition, aims and objectives
- (b) Methods and Procedures

(c) Indications and contraindications

· **Inkebaab (Vaporisation)**

(a) Definition, aims and objectives

(b) Methods and Procedures

(c) Indications and contra indications

· **Definitions aims, objectives, procedures indications and contraindications of the following regimens**

(a) Takmeed, Tikor, Pashoya,

(b) Ialam,

(c) Nushuq, Tadheen, Tazahha, Saoot

(d) Lakhlakha,

Reference Books:

1. Razi, A.M.Z. (2002) "Kitabul Hawi", Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
2. Jurjani, M.H. (1903) "Zakheera Khawarzaam Shahi" (Urdu Translated by Hakim Hadi Hussain Khan), Munshi Nawal Kishore, Lucknow.
3. Ibn-e-Rushd, A.W.M.B. (1987) "Kitabul Kulliyat" (urdu translation), CCRUM, Delhi.
4. Ibn Sina. YNM, *Al-Qānūn fi 'l-Tibb*, Jamia Hamdard, New Delhi
5. Ibn-ul-Quf. YNM, *Kitāb-ul-Umdah fil-Jarāhat*, Part 1, Dā'erat-ul-M'ārif, Hyderabad, p. 175-180.
6. Mohd Ehsanullah ,Mohd Inayatullah *Ilaj bit tadbeer jaded Tehqeeqat wa Mufeed tauzeehat* ,Ist Edition, 2006, NCPUL New Delhi

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
- Practical Training in OPD and IPD
- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory(25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)

- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course: Amraze Nizame Aasab, Amraze Nafsania wa Ghudade Laqanati (Paper I)

L-T-P: L=4, T=4, P=10 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

- CLO-1 make the provisional diagnosis on the basis of signs and symptoms of diseases of nizame a'asab (CNS) and Ghudade Laqanati (Endocrine) [**Apply**]
- CLO-2 elicit and identify different signs and maneuvers pertaining to CNS and Endocrine system diseases [**Remember**]
- CLO-3 analyze the investigations and new techniques of diseases of CNS and Endocrine system [**Understand**]
- CLO-4 interact confidently with the patients and their family about the status of the disease, management outcomes and prognosis [**Apply**]
- CLO-5 decide the line of management of diseases of CNS and Endocrine system and write a prescription specific to the diagnosed disease [**Apply**]

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	2	3	3	3	2	3	3	2	2	3	2	3	3	2	3	3
CLO2	2	3	3	3	3	3	2	2	3	2	2	3	3	1	2	3
CLO3	3	3	3	3	3	3	3	2	3	3	3	3	3	2	3	3
CLO4	2	3	3	3	3	3	3	2	3	3	3	3	3	3	2	3
CLO5	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (60 Hours)

Amraze Nizame Asbi

Suda wa aqsaam
Sarsam wa aqsaam
Warme dimaghi nukhai
Warme Aghshiyae dimagh
Duar
Qoma
Sara
Tashannuj
Rasha wa aqsaam (Daur raqs aur Parkinsonism)
Sakta
Khuraje Dimagh
Falij
Laqwa
Istarkha
Huzale Zohri
Waja ul Asab
Dimaghi
Sudde
Jiryaane Khoon Dimaghi
Alzheimer's disease

Amraze Nafsaniya

Sahar
Nisyaan
Malankholiya
Mania

Kaboos
Izterabe Nafsani
Izmehlaal
Ikhtinaqur raham
Psychosis
Neurosis Ikhtilaj
Akhoni (Waham)
Shahwate Kalbia
Jooul Baqar.

UNIT 2 (60 Hours)

Ghuddae Laqanati

Ghuddae laqanati aur unki ifrazat ka tasawwur atibba ki nazar mein (umoomi jayaeza)

Ghuddae Nukhamiya

Ghuddae Nukhamia ke ifrazat ki qillat wa ifrat se hone wale Amraz

Kibrul Izm,
Qazamah (Dwarfism)
Ziabetes sada
Salate nukhamiya

Ghuddae Darqiya

Ghuddae Darqiya ke ifrazat ki qillat wa ifrat se hone wale Amraz

Farte Darqiya (Hyperthyroidism)
Tasammume Darqiya
Qusoore Darqiyaaq
Ghoter (Goiter) Cretinism
Ozema Mashati
Salate Darqiya.

Ghuddae Janibud Daraiqa

Ghuddae Janibud darqiya ke ifrazat ki qillat wa ifrat se hone wale Amraz

Farte duraiqiya (Hyper parathyroidism)
Qusoore Duraqiya (Hypo parathyroidism).

Banqaras

Banqaras ke hissae Laqanati ke ifrazat ki qillat wa ifrat se hone wale Amraz

- Ziabetus Sukkari (Diabetes mellitus)
- Qillate Sukkaridum (Hypoglycaemia)
- Salae Jazeerom (Insulinoma)

UNIT 3 (60 Hours)

Ghuddae Fauqul Kulya

Ghuddae Fauqul kulya ke ifrazat ki qillat wa ifrat se hone wale Amraz

- Mutalazema
- Koshing
- Aldosteroma
- Warmul qawatim (Pheochromocytoma)
- Addison's disease
- Naqse aldosteromia (Hypo aldosteronism)

Metabolic Disorders

- Diabetes mellitus
- Lipid metabolic disorders
- Osteoporosis

Amraze Tavarus

- Sibghi Jasdi Amraz (Autosomal disorder)
- Sinfi vabasta Amraz (Sex linked diseases)

Amraze Khusiya

- Ifrazat ka mukhtasar jayeza
- Khusiya aur amraze bah ka bahmi taalluq Jinsi Amraz
 - Jinsi mubtasar (sexual paucity)
 - Aajil buloogh (Delayed or Incomplete puberty)
 - Mutlazima Klinefelter (Klinefelter syndrome)
 - Acquired testicular defects
 - Infertility

Salate Khusiya
Tasaddiur Rajal (Gynaecomastia)

Amraze Khusiyatur Raham

Balooghe muhtasar (Isosexual precocious puberty)
Turner syndrome
Uqr
Salate
Khusiyat ur raham.

Reference Books:

1. Ibn-Sina, Alqanoon Fit Tib (Urdu Translation by Ghulam Hasnani Kantoori)
2. Ismail Jurjani, Zakhira Khawarizam Shahi (Urdu translation by Hakeem Hadi Hasan), Idara Kitabus Shifa
3. Harrison's Internal Medicine, Mc Graw Hill Professionals
4. Davidson's Principles and Practice of Medicine, Elseviers Publicatio

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
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- Case Presentation by Students at regular intervals
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Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory(25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course:

**Amraze Nizame Tanaffus wa Daurane Khoon, Tauleede Dam, Ghudade Lymphaviah
(Diseases of Respiratory, Circulatory, Haemopoetic Systems, Lymph nodes) PAPER – II**

L-T-P: L=4, T=4, P=10 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-2 **Demonstrate clinical skills based on history, physical examination and relevant investigations and Unani principles for making provisional diagnosis of disorders of Amraze Nizame Tanaffus wa Daurane Khoon, Tauleede Dam, Ghudade Lymphaviah (Diseases of Respiratory, Circulatory, Haemopoetic Systems, Lymph nodes) both with respect to Unani principles and contemporary sciences.**

CLO-2 Manage and treat disorders of Amraze Nizame Tanaffus wa Daurane Khoon, Lymphaviah through Unani system of medicine.

CLO-3 Decision making skills for advising requisite investigations, management of above mentioned diseases or referral to higher specialized centres of treatment.

CLO-4 **Demonstrate effective communication skills to interact in a respectful and compassionate manner with the patient and patients family ensuring patient's confidentiality and privacy to encourage positive patient participation.**

CLO-5 Work rationally, ethically and compassionately to become a responsible member of the health care system. Recognize and accept limitations in one's knowledge, skills, attitudes, and behaviors, and continuously improve these attributes.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	3	3	2	2	2	2	2	3	2	1	3	1	3	2	3	3
CLO2	3	3	2	2	2	2	2	3	2	1	3	1	3	2	3	3
CLO3	3	3	3	3	1	2	2	2	2	1	3	1	3	3	2	2

CLO4	2	3	3	2	1	3	3	2	2	3	1	1	2	2	2	2
CLO5	2	2	3	2	1	2	2	3	2	3	2	1	3	2	2	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (60 Hours)

Amraz Nizame Tanaffus

Sual, Warne Hanjra,

Warne Qasbatur Riya,

Warne Shobatur Riya,

Sartane Shobatur Riya,

Ittisae Shob, Nafsuddam, Bohtus Saut, Zeequn Nafas,

Zaatur Riya,

Zaatul Janb,

Khuraje Riya,

Nafkhatu Riya,

Taqayyuhe Sadr,

Istesqaus Sadr,

Sartaane Riya,

Suqoote Riya,

Suddae Riya,

Tadarrune Revi,

Ittesae Shobatur Riya,

Faza ki aaludgi se mutaaliq Amraze Riya.COPD,

Tumours of bronchus and lungs,

Respiratory failure

UNIT-II (60 Hours)

Amraze Qalb wa Dauraane Khoon

Sue mizaje qalb,

Zoafe qalb, Khafqaan,

Warm Ghilaafe qalb,
Warm Azlate qalb, Warm
Batanae qalb,
Warm Batanae qalb hudaari,
zubhai sadria ,
Ghashi,
Izamul qalb,
Iflaasul qalb,
Maitatul qalb,
Suqoote qalb imtelai,
Corpulmonale,
Zaghtuddum qavi.
Saqoot Dauraane
Khoon satahi,
Tasallube sharayeen,
Anurisma, Manuatul qalb,
Cardiac arrhythmia,
Khilqi
amraze qalb, Butue qalb,
Cardiac arrest, Cardiac failure,
Sadma Heart block.
Pericardial Effusion

Amraz Samamate Qalb

Tazaiuqur raseen (mitral stenosis), qusoorur raseen (mitral incompetence), tazaiuqe aurata (aortic stenosis), qusoore aurata (aortic incompetence).

UNIT-III (60 Hours)

Amraze Sharayeen wa aurida (Diseases of vessels)

Atherosclerosis, Aneurism, thrombophlebitis, Burger's disease, Raynaud's disease and other vascular diseases.

Taftishaat

Amraze Qalb wa Daurane khoon ke jaanch ke mukhtalif qadeem wa jadeed tareeqon ke bare mein malumat. (e.g. ECG, Echocardiography, Cardiac imaging, Catheterization etc.)

Amraze Dam

Faqruddam, Abyazuddam, Thalasaemia, Fasade Khoon, Nazafuddam Mizaji, Amraze
Injimaduddam.thrombocytopenia

Immunological Disorders

Haemopoitic system

Lymph nodes and disease due to atmospheric pollution

Reference Books:

1. Ibn-Sina, Alqanoon Fit Tib (Urdu Translation by Ghulam Hasnani Kantoori), Idara Kitabus Shifa
2. Ismail Jurjani, Zakhira Khawarizam Shahi (Urdu translation by Hakeem Hadi Hasan) Idara Kitabus Shifa
3. Kabiruddin, Moalajat Sharh-e-Asbab, Idara Kitabus Shifa
4. Ajmal Khan, Hāzique, Madina Publishing Company
5. Harrison's Internal Medicine, Mc Graw Hills Professionals
6. Davidson's Principles and Practice of Medicine, Elseviers Publications

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
- Practical Training in OPD and IPD
- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory(25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course: Amaraze Nizame Hazm, Baul wa Tanasul wa Istahala

(Diseases of Digestive & Urogenital systems and Metabolism) (Paper

III)

L-T-P: L=4, T=5, P=10 hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

- CLO-1 make the provisional diagnosis on the basis of history, physical examination and investigations for the disorders of Nizame Hazm, Baul wa Tanasul wa Istahala **[Apply]**
- CLO-2 Manage and treat disorders of Amraze Nizame Hazm, Baul wa Tanasul wa Istahala through Unani medicine. **[Apply]**
- CLO-3 advising requisite investigations, management of above mentioned diseases or referral to higher specialized centres of treatment. **[Apply]**
- CLO-4 Demonstrate effective communication skills to interact in a respectful and compassionate manner with the patient and patients family ensuring patient's confidentiality and privacy to encourage positive patient participation. **[Apply]**
- CLO-5 deliver health care rationally, ethically and compassionately to become a responsible member of the health care system **[Remember/ Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	3	3	2	3	1	2	2	2	1	1	3	1	3	3	2	2
CLO2	3	3	2	3	1	2	2	2	1	1	3	1	3	3	2	2
CLO3	3	3	3	3	1	2	2	2	2	1	3	1	3	3	2	2
CLO4	2	3	3	2	1	3	3	2	2	3	1	1	2	2	2	2
CLO5	2	2	3	2	1	2	2	3	2	3	2	1	3	2	2	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (60 Hours)

Approach towards a patient with Gastrointestinal Disease

Amraz Fam (Diseases of Mouth)

Amraz Mari (Diseases of Oesophagus)

Amraz Maedah (Diseases of Stomach):- 19

- Zofe medah
- Sue mizaje medah
- Warne medah
- Qarho-e-medah-o-asna-e-ashari (Peptic Ulcer Disease)
- Kasrat-o-qillat-e-hamoozat-e-maedi
- Sartaan-e-medah (Carcinoma of Stomach).
- Tukhma
- Sue-e-hazm

Amraz Amaa (Diseases of Intestines):-

- Zarb-o-khilfa (Malabsorption Syndrome).
- Disorders of Absorption
- Ishaal (Diarrhoea).
- Zalaqul-ama.
- Qoolanj-e-ama (Intestinal colic).
- Baraz-ud-dam (Melena).
- Warm-e-qaulon (Inflammatory Bowel Disease).
- Warm-e-qaulon qarhi.(Ulcerative colitis)
- Diqq-e-ama (Intestinal Tuberculosis).
- Iltehaab-e-miqad (Proctitis).
- Acute Appendicitis and Peritonitis
- Irritable Bowel Syndrome,
- Intestinal Obstruction
- Common Diseases of Colon and Anorectum

UNIT 2 **(60 Hours)**

Diseases of Liver and Biliary Tract:-

- Zofe kabid.
- Su-e-mizaj-e-kabid.
- Warm-e-kabid (Hepatitis).
- Dubelatul kabid (Liver abscess).
- Yerqaan. (Hyperbilirubinemia)
- Alcoholic liver Disease
- Talaiuf-e-kabid (Cirrhosis of liver)
- Hepatic Failure
- Carcinoma of liver.
- Istasqa (Ascitis).
- Izm ul kabid (Hepatomegaly).
- Hisatul mirara (Cholyolithiasis)
- Warm e mirara (Cholecystitis).
- Other Biliary Diseases

Amraz Tihal (Diseases of Pancreas):-

- Warm-e-banqaraas (Pancreatitis).

All modern diagnostic procedures related to Digestive system.

Amraz-e-Nizam-e-Baule-o-Tanassul wa Istahala (diseases of urinary and reproductive system and metabolism)

UNIT 3 **(60 Hours)**

Diseases of Urinary System:

Diseases of Kidney:

- Su-e-mizaj-e-kuliya.
- Zofe kuliya.
- Warm-e-kuliya.(Glomerulonephritis)
- Mutafarrique Amraz-e-kuliya.
- Diq ul kuliya. (Renal Tuberculosis)
- Saqoot ul kuliya (Renal paranchymal Disease, Acute and Chronic Renal Failure).
- Nephrotic Syndrome
- Warm-e-Hauz ul kuliya (Pyelo-nephritis).

- Hisatul kuliya (Renel calculi).
- Hydronephrosis.
- Incontinence of urine.
- Baulud dam (Haematuria).
- Renal lesions in diabetes.
- Urinary Tract Diseases

All modern diagnostic procedures related to Uro-genital system

Diseases of Reproductive System:

- Zofe baah.
- Surrat-e-inzal.
- Kasrat-e-Ehtalaam
- Aur mutalique amraz.
- Salpingitis
- Oophoritis
- Per vaginal Bleeding Disorders (Menorrhagia, Metrorrhagia etc.)
- Proctitis
- Sterility

Diseases of Metabolism: Common metabolic disorders and diseases

Reference Books:

6. Kabiruddin M. *Bayaze Kabeer*. Part-II. Hyderabad: Hikmat Book Depot, Deccan;(YNM)
7. Razi, A.M.Z, (1980) “Kitabul Abdal” C.C.R.U.M, New Delhi.
8. Razi, A.M.Z. (1997) “Kitabul Hawi”, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
9. Razi, A.M.Z. (2002) “Kitabul Hawi”, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
10. Jurjani, M.H. (1903) “Zakheera Khawarzaam Shahi” (Urdu Translated by Hakim Hadi Hussain Khan), Munshi Nawal Kishore, Lucknow.
11. Ibn-e-Rushd, A.W.M.B. (1987) “Kitabul Kulliyat” (urdu translation), CCRUM, Delhi.
12. Ibn-e-Sina (1927) “Alqanoon Fit Tibb” (urdu translation by Ghulam Hasnain Kantoori) Sheikh Mohammad Bashiir & sons, Lahore, Vol.II.
13. Ibn-e-Zohar, A.M. (1986) “Kitab al Taisir Fil Mudawat wa Tadabeer” (Urdu Translation by CCRUM, Ministry of Health and Family Welfare, Govt. of India.
14. Kabiruddin, H. (1951) “Ilajul Amraz” Sheikh Mohammad Bashir & Sons, Lahore, Pakistan

15. Khan, H.A. (2000) "Haziq" Beeswein Sadi Publications (Pvt) Ltd, New Delhi.
16. Khan, M.A. (1940) "Ikseer-e Azam" (Urdu translation by Kabiruddin), Tibbi Compony, Rawalpindi, Pakistan.
17. Khan, A, (1303) H "Muheetul Azam" Dar matba nizami waqah Kanpur.
18. Khan, A, (1992) H "Qarabadeen Azam" Ajaz publication House Daryagunj New Delhi.
19. Anonymous, 2010, NFUM, Ministry of Health and Family Welfare, Dept of AYUSH, New Delhi.
20. Anonymous. *National Formulary of Unani Medicine*. Part-I, New Delhi: CCRUM, Ministry of H & F.W. Govt. of India
21. John Firth; Christopher Conlon; timothy Cox, Oxford textbook of medicine:6th edition: Oxford: University press
22. James JL, Fauci AS, Kasper DL, Hauser SL, Longo DL, Loscalzo J, eds: Harrison' s Principles of Internal Medicine: Vol 1 and 2, 20th edition :McGraw-Hill education New York
23. Raltson, Stuart H., Ian D. Penman, Mark W.J. Strachan, Richard Hobson: Davidson' s Principles and Practice of medicine :23rd edition: London, England: Elsevier Health Sciences
24. Goldman, Lee, Andrew I. Schafer, and Rusell L: Goldman-Cecil Medicine: 26th edition: Philadelphia, PA: Elsevier
25. Stephen J McPhee; Michael W Rabow :Current medical diagnosis & treatment;57th edition : New York : McGraw-Hill Education

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
- Practical Training in OPD and IPD
- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory (25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

Course Code:

Title of the Course: Amraze Mutaddiah Hummiyat, Jild wa Mafasil (Paper IV)

L-T-P: L=4, T= 5, P=10 hours/week.....

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

- CLO-1 make the provisional diagnosis on the basis of signs and symptoms of Mutaddiyah diseases, different types of fever, commonly prevalent diseases of skin and diseases of joints. **[Apply]**
- CLO-2 elicit and identify different signs and maneuvers pertaining to above mentioned diseases. **[Remember]**
- CLO-3 analyze the investigatory findings and to apply new techniques developed for diagnosis and management of above mentioned diseases. **[Understand]**
- CLO-4 interact confidently with the patients and their family about the status of the disease, management outcomes and prognosis. **[Apply]**
- CLO-5 decide the line of management and write a comprehensive prescription for the above mentioned disease. **[Apply]**

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	PSO 4
CLO1	2	3	3	3	2	3	3	2	2	3	2	3	3	2	3	3
CLO2	2	3	3	3	3	3	2	2	3	2	2	3	3	1	2	3
CLO3	3	3	3	3	3	3	3	2	3	3	3	3	3	2	3	3
CLO4	2	3	3	3	3	3	3	2	3	3	3	3	3	3	2	3
CLO5	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write ‘3’ in the box for ‘High-level’ mapping, 2 for ‘Medium-level’ mapping, 1 for ‘Low-level’ mapping. Map with PSOs wherever applicable.

DETAILED SYLLABUS:

UNIT 1 (60 Hours)

Amraze Mutaddiyah (Infectious diseases) · Mana'at and Tadiya · Importance of Mana'at in the treatment of infectious diseases · Classification of Infectious Diseases · Micro-organism and host interaction · Nosocomial Infections · Bacterial Diseases · Viral Diseases · Fungal Diseases · Protozoal Diseases · Helminthic Diseases · HIV and associated disorders
Hummiyat (Fevers) ·
Tareef-e-Humma · Ufoonat · Aam Usoole Ilaj

UNIT 2 (60 Hours)

Examination of Skin and an approach to diagnosing skin diseases · Principles of therapy · Disorders of pigmentation · Disorders of nails · Diseases of Hair · Different Skin Diseases · Skin Infections and Infestations · Skin in systemic diseases · Management of skin diseases cosmetology Amraaze-Jild (Skin Diseases) · Applied anatomy of Skin · Functions and classification of skin ·

UNIT 3 (60 Hours)

Amraz-e-Mafasil (Rheumatology) · Clinical examination of musculoskeletal system · Applied anatomy, physiology and Investigations · Major manifestations of musculoskeletal diseases Niqris (Gout) Wajaul Mafasil (Arthralgia) Warne-Mafasil (Arthritis) Tahajjur Mufasil (Fixation of Joint) Irqun-Nisa (Sciatica) Wajawul Zahar (Backache) Wajawul Khasra (Low Backache) Wajawul Qutn (Lumbago) Osteoporosis Ankylosing spondylosis · Principles of Management of musculoskeletal disorders.

Reference Books:

1. Ibn-Sina, Alqanoon Fit Tib (Urdu Translation by Ghulam Hasnani Kantoori), Idara Kitabus Shifa
2. Ismail Jurjani, Zakhira Khawarizam Shahi (Urdu translation by Hakeem Hadi Hasan) Idara Kitabus Shifa
3. Kabiruddin, Moalajat Sharh-e-Asbab, Idara Kitabus Shifa
4. Ajmal Khan, Hāzique, Madina Publishing Company
5. Harrison's Internal Medicine, Mc Graw Hills Professionals

6. Davidson's Principles and Practice of Medicine, Elseviers Publications

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Classroom Teaching/ Group Discussion
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- Case Presentation by Students at regular intervals
- Seminar Presentation of diseases of the subject

Assessment methods and weightages in brief (4 to 5 sentences)

- Three Internal Assessments Theory (25% of the Total Marks)
- Internal Assessment Practical (25% of the Total Marks)
- Final Examination Theory (75 % of Total Marks)
- Final Examination Practical (75 % of Total Marks)

DOCTOR OF MEDICINE

(MD)

TAHAFFUZI WA

SAMAJI TIB

NAME OF THE DEPARTMENT: TAHAFFUZI WA SAMAJI TIB

Vision Statement (Department Level):

To build an eminent public health work force for protection and promotion of health and well being of the community.

Mission Statements (3 to 4) (Department Level):

MS1: To train physicians to be effective Public health administrators through well designed educational curriculum, knowledge and expertise.

MS2: To provide opportunities for Research and Development for developing new strategies of improving Community Health.

MS3: Collaborating with world class organisations in order to strengthen international ties and extend outreach to other countries.

MS4: To popularise the significance of preventive health care by creating awareness in the community.

Name of the Academic Program: MD- Tahaffuzi wa Sami Tib (TST)

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Academic Programme (MD Tahaffuzi wa Sami Tib), students will be able to:

QD1: Demonstrate proficiency in the area of community medicine in general and preventive health in particular.

QD2: Demonstrate comprehensive knowledge and skills in areas related to nutrition, epidemiology and environmental studies, demography and regimenal care.

QD3 :Use knowledge and skills required for identifying community health problems, collection of relevant data, their analysis and formulating their solutions.

QD4: Apply knowledge in areas related to preventive aspect of Unani System of Medicine in order to solve complex modern day health concerns with well defined solutions.

QD5: Demonstrate the competence for providing assistance to national and international health platforms.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	3	2	2	3
QD-2	3	2	1	3
QD-3	3	3	2	3
QD-4	2	3	2	3
QD-5	3	2	3	3

Write '3 'in the box for 'High-level'mapping, 2 for 'Medium-level'mapping, 1 for 'Low-level'mapping.

PROGRAM LEARNING OUTCOMES (PLOs) (12)

After completing this Program, the students should be able to:

PLO1: Develop in-depth knowledge and skills for solution of Research problems with accuracy and precision.

PLO2: Deliver comprehensive care for the individual and community keeping in accordance of the national health objectives.

PLO3: Evaluate practices and theories on the basis of knowledge of evidence based scientific approach.

PLO4: Express with clarity and proficiency thoughts and ideas related to preventive and promotive health.

PLO5: Develop a sense of curiosity and inquisitiveness for the purpose of defining research problems, formulating and testing hypothesis, analysis of data and drawing conclusions from it.

PLO6: Demonstrate the ability to render services effectively as a member of a team in a community setting.

PLO7: Demonstrate the ability to work in a multi-cultural society with people of diverse backgrounds and communicating with them effectively and respectfully.

PLO8: Demonstrate capability to use modern ICT tools of learning for collection, analysis and evaluation of data.

PLO9: Inculcate professional honesty and integrity, perseverance and sustainability and at the same time avoid unethical behaviour in all aspects of work.

PLO10: Demonstrate the capability to provide leadership by building an inspiring vision and motivating the team members for best output in achieving the vision.

PLO11: Develop judgment skills in making appropriate decisions in the interest of the health of the individual and the community.

PLO12: Demonstrate the ability of acquiring knowledge through continuous self learning in accordance with the current demands of the patients and community.

PROGRAM SPECIFIC OUTCOMES (PSOs)

(In case of specializations in each academic program, 2 to 4)

After completing this Program, the students should be able to:

PSO1: Develop skills and knowledge to intelligently interpret public health problems and provide solution by choosing most appropriate research methods and tools.

PSO2: Develop competency in public health administration with effective leadership and managerial skills for management of healthcare organisations.

PSO3: Serve the community for the achievement of National health goals for overall human development.

**Mapping of Program Learning Outcomes (PLOs)
With Qualification Descriptors (QDs)**

	QD-1	QD-2	QD-3	QD-4	QD-5
PLO-1	2	2	3	3	2
PLO-2	3	3	2	3	3
PLO-3	3	3	3	2	2
PLO-4	3	3	2	3	2
PLO-5	3	3	3	3	3
PLO-6	2	1	2	1	3
PLO-7	2	1	2	1	3
PLO-8	2	2	3	3	3
PLO-9	1	1	3	3	3
PLO-10	2	2	3	3	3
PLO-11	3	3	3	3	3
PLO-12	3	3	3	3	3
PSO-1	3	3	3	3	3
PSO-2	3	3	3	3	3
PSO-3	3	3	3	3	3

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

COURSE DESIGN

Course Code: MDT101 **Title of the Course:** *Tahaffuzi wa Samaji Tib Ka Tasawwur aur Tareekh* (Concepts and History of Preventive and Social Medicine)

L-T-P: 60(L), 20(T) Total=80 Credits: NA

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

After completing this Course, the students should be able to:

CLO1: Correlate the fundamentals of Medicine in different civilisations of the past.(Remember)

CLO2: Explain the emergence and extent of Preventive and Social Medicine.(Understand)

CLO3: Demonstrate the knowledge of phases of public health for the achievement of Health for All.(Apply)

CLO4: Analyse the difference in Curative, Preventive and Social Medicine.(Analyse)

CLO5:Appraise the changing concepts of Preventive Medicine through the history.(Evaluate)

**Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	3	1	2	3	3	3	3	3	3	3	3
CLO 2	1	2	2	2	3	2	3	2	2	2	3	3	3	2	3	3
CLO 3	3	3	3	3	2	3	3	3	3	2	3	3	3	2	3	3
CLO 4	2	3	1	3	1	3	3	3	2	2	3	3	2	2	3	3
CLO 5	1	3	3	3	2	1	3	3	3	3	3	3	2	3	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 20 hours

Evaluation of *Tahaffuzi-wa-Samaji Tib* (PSM)

Historical Background- Man & Medicine towards Health for All

Medicine in Ancient Time (With Special Reference to *Tahaffuzi wa Samaji Tib*)

- Primitive Medicine
- Indian Medicine
- Chinese Medicine

- Egyptian Medicine
- Mesopotamian Medicine
- Greek Medicine
- Roman Medicine
- Middle Ages

Unit 2: 20 hours

The Dawn of Scientific Medicine

- Revival of Medicine
- Sanitary Awakening
- The Rise of Public Health
- Germ Theory of Disease.

The Birth of *Tahaffuzi Tib* (Preventive Medicine)

- Public Health .
- Social Medicine
- Community Medicine
- Preventive and Social Medicine

Unit 3:20 hours

Modern Medicine

- Curative Medicine
- Preventive Medicine
- Social Medicine

Changing Concepts in Public Health

- Disease Control Phase
- Health Promotion Phase
- Social Engineering Phase
- Health for All Phase

Reference Books:

1. K.Park, Park’s Textbook of Preventive and Social Medicine, 26th edi, Banarasidas Bhanot publishers.
2. Mahajan & Gupta, Textbook of Preventive and Social Medicine, 4th edi, Jaypee publishers.
3. Sunder Lal, Adarsh & Pankaj, Textbook of Community Medicine, 7th edi, CBS publishers and distributors.
4. A.H. Suryakantha, Community Medicine with Recent advances, 5th edi, Jaypee publishers.
5. Piyush Gupta, Textbook of Community Medicine, 3rd edition, CBS Publishers and Distributors

Course Code: MDT102Title of the course: *Sehat wa Marz ka Tasawwur aur Mahaul ke Asrat (Concept of Health and Disease and Effects of Environment)*

L-T-P: 60(L), 20(T) Total=80 Credits: NA

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

After completing this Course, the students should be able to:

CLO1: Explain the concept of Health, it’s determinants, dimensions and indicators and the concept of well being. (Understand)

CLO2: Recognise the effect of environmental factors on Human health and Disease.(understand)

CLO3: Demonstrate the understanding of concepts of diseases.(apply)

CLO4: Apply the knowledge of different levels of Prevention and Intervention in the management of public health problems.(apply)

CLO5: Appraise the concepts of Health and Disease according to Unani System of Medicine and their correlation with the modern concepts.(evaluate)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	2	2	1	3	3	3	3	3	1	3	2
CLO 2	1	2	2	2	3	2	3	2	3	2	3	3	3	3	3	3
CLO 3	3	3	2	3	3	2	3	3	3	3	3	3	1	2	3	3

CLO 4	2	3	1	2	2	3	3	3	3	2	3	3	2	3	3	3
CLO 5	1	3	3	3	2	1	3	3	2	3	3	3	2	3	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 20 hours

Concept of Health

- Changing Concepts:

Biomedical, Ecological, Psychological, Holistic Concept

- Definition of Health:

W.H.O. Definition in comparison of others, New Philosophy of Health

- Dimensions of Health:

Physical, Mental, Social, Spiritual, Emotional, Vocational and others

- Concept of Well-being:

Standard of living, Level of living, Quality of life

Spectrum of Health

- Determinants of Health:

Heredity, Environment, Lifestyle, Socio-economic condition, Health & Family

Welfare services and other factors

Ecology of Health

Right of Health

- Responsibility of Health:

Individual Responsibility, Self Care in Health, Community Responsibility, State Responsibility, International Responsibility.

Health Development

- Indicators of Health:

Mortality, Morbidity, Disability rates, Nutritional Status, Health Care delivery,

Utilization rates, Indicator of Social and Mental Health, Environmental, Socio-economic,

Health Policy, Indicators of Quality of Life & other indicators.

Unit 2: 20 hours

Health Situation in India:

- Demography profile, Mortality profile, Morbidity profile, Health Care Facilities & Personnel

- **The Developed & Developing Regions:**

Social & Economic: Characteristics, Demographic Characteristics, Contrast in Health (Health gap)

Health Service Philosophies

Health System

- **Levels of Health Care:**

Primary Health Care, Secondary Health Care, Tertiary Health Care

Health for All

Primary health Care

Health Policy

National Health Policy

Health Services Research

Unit 3:20 hours

THE CONCEPT OF DISEASE

- **Concept of Causation:**

Germ theory of diseases, Epidemiological trial, Multifactorial causation, web of Causation

- **Natural History of Disease:**

Pre-Pathogenesis Phase, Pathogenesis Phase

- **Agent Factors:**

Biological factors agents, Nutrient agents, Physical agents, Chemical agents, Mechanical agents, Absence or Insufficiency or Excess of a factor necessary to health, Social agents.

Host Factors (intrinsic)

- **Environmental Factors (extrinsic):**

Physical environment, Biological environment, Psycho-social environment

Spectrum of Disease

The iceberg of Disease

CLO 1	2	3	2	3	3	2	2	1	3	3	3	3	3	3	3	3
CLO 2	1	3	2	2	3	2	3	2	2	3	3	3	3	2	3	3
CLO 3	3	3	3	3	2	2	3	3	3	3	3	2	1	2	3	3
CLO 4	3	3	1	2	3	2	3	3	2	2	3	3	2	2	3	3
CLO 5	1	3	3	3	2	1	3	3	3	3	3	3	3	2	3	3

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 20 hours

Usool-e-Tehqeeq (Research Methodology)

Introduction

- Definition
- Classification
- Research Protocol

The Problem:

- Selection of the Problem
- Presentation

Literature Survey:

- The Data
- Resources of data
- Preservation of data

Material & Methods

- The Design of Experiment

- The Design of Apparatus
- Reporting of the results

Research Ethics

- Secrecy
- Acknowledgement
- Sacrifice

Specific Research Method:

- Literary / Clinical

Clinical Trial:

- Introduction & Protocol
- First Phase of Clinical Trial
- Second Phase of Clinical Trial
- Third Phase of Clinical Trial

Screening

- Definition with importance
- Aims & Objectives
- Diagnostic Tests for Screening
- Uses of Screening

Unit 2: 20 hours

Hayati Shumaariyaat (Bio-Statistics)

- Numerical Computation
- The Aim of Statistical Methods
- Classification, Sampling & Statistical Population
- Presentation of Statistics
- The Average
- The Variability of Observations
- The Testing of Hypothesis
- Miscellaneous
- Frequency, Tables, Skewness Probit Analysis, Latin Square, Cross over Test

Unit 3: 20 hours

Jadeed Izaafaat- Sehati Tanzeemaat (Health Organizations)

- Importance
- Objectives & their functions
- International Health Organizations: WHO, UNICEF, UNESCO, UNDP, FAO, ILO, USAID, World Bank, International Red Cross, Ford Foundation, CARE
- Health Delivery System in India
- Health Organizations- Central Level
- Health Organizations -State Level
- Other Popular Non-Government Organizations

Reference Books:

1. T. Bhaskara Rao(2010) Methods of Biostatistics, 3rd edition, Paras Publications, Delhi.
2. BK Mahajan(2010), Methods in Biostatistics (For medical students and Research workers), 7th edition, Jaypee publications, New Delhi.
3. CR Kothari & Gaurav Garg(2019), Research Methodology: Methods and Techniques, 4th edition, New age international publishers, New Delhi.
4. K.Park(2021) Park's Textbook of Preventive and Social Medicine, 26th edition, Banarasidas Bhanot publishers.
5. Mahajan & Gupta(2013),Textbook of Preventive and Social Medicine, 4th edi, Jaypee publishers.

Course Code: MDT201 Title of the Course: *Dalak, Riyazat, Hammam aur Yoga ki Ahmiyat, Amraze Mutaadiya wa Wabaiya aur Tahaffuzi Iqdamat (Importance of Massage, Exercise, Bathing methods and Yoga, Infectious and Epidemic diseases and it's preventive measures)*

L-T-P: 60(L), 20(T) Total=80 Credits: NA

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

After completing this Course, the students should be able to:

CLO3: Express the dynamics of disease transmission and disease control.(understand)

CLO1: Demonstrate the knowledge of *Dalak, Riyazat, Hammam* wrt their prophylactic and therapeutic importance. (apply)

CLO2: Discover the clinical application of Yoga in day to day lifestyle.(apply)

CLO4: Analyse the importance of immunisation in the control of Communicable diseases.(analyse)

CLO5: Interpret the epidemiology of Non communicable diseases.(evaluate)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	2	1	1	3	3	3	3	3	3	3	3
CLO 2	1	2	2	2	3	2	3	2	3	2	3	3	3	2	3	3
CLO 3	3	3	3	3	2	2	3	3	3	3	3	2	1	2	3	3
CLO 4	2	3	1	2	2	2	3	3	2	2	3	3	2	3	3	3
CLO 5	1	3	2	3	2	2	3	3	2	3	3	3	2	1	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 20 hours

DALAK:

- Definition, Principles/ Objectives & Uses of *Dalak*.
- Classification of *Dalak*
- Uses of *Dalak* according to age, sex, weather & body structure.
- Adverse effects of excessive *Dalak*.
- Important advises for *Dalak*.
- Uses of Oils (*Roghaniyat*) in *Dalak*.
- Contraindications in *Dalak*.
- Therapeutic importance of *Dalak*.

RIYAZAT:

- Definition, Principles/ Objectives & Uses.
- Conditions for getting benefit by *Riyazat*.
- Classification of *Riyazat*.
- Loss in Excessive *Riyazat*.
- Specific *Riyazat* for various organs of the body.
- Uses of *Riyazat* according to Age, Sex, and Weather & Body built.
- Time & Quantity of *Riyazat*.
- Therapeutic importance and uses of *Riyazat*.

Unit 2: 20 hours**HAMMAM:**

- Definition and objectives of *Hammam*.
- Conditions for good bath.
- Different rooms of *Hammam* and its temperament.
- Uses of Air and Water in *Hammam*
- Contraindications in *Hammam*.
- Time for *Hammam*,
- Different types of *Hammam* and its effects.
- Therapeutic importance and uses of *Hammam*

YOGA:

- Definition
- Importance of Yoga
- Historical background of Yoga
- Various Aasanas (classifications) used in Yoga
- Yoga and Health
- Importance of Yoga in Medicine
- Important aspects of Yoga
- Applied aspects of Yoga
- Applied aspects of Yoga

UNIT 3: 20 hours

Introduction

Definitions related with *Amraaz-e-Mutaaddiya wa Wabaiya*

Dynamics of Disease transmission

1. Reservoir of infection
2. Routes of transmission

Principles of Disease, Control and Prevention

Controlling of Reservoir/Source

- By early diagnosis
- Notification
- Isolation
- Treatment
- Quarantine
- Surveillance
- Disinfection

Blocking the Channels of Transmission

- Vehicle Transmission
- Vector Transmission
- Airborne Transmission
- Contact Transmission

Protecting susceptible population

Active Immunization

Passive Immunization

Chemo-prophylaxis

Health Education

Disinfection

Types of Disinfection

Disinfectants

Disease

Epidemiology of Communicable Diseases

Respiratory infections

Intestinal infections

Arthropods borne infections

Zoonosis

Viral Diseases

Bacterial Diseases

Rickettsial Disease

Parasitic Zoonosis

- Surface infections
- Emerging and Re-Emerging infectious
- Hospital acquired infections

Epidemiology of Chronic Non-Communicable Diseases

Reference Books:

1. K.Park(2021)Park's Textbook of Preventive and Social Medicine, 26th edi, Banarasidas Bhanot publishers.
2. Mahajan & Gupta(2013), Textbook of Preventive and Social Medicine, 4th edi, Jaypee publishers.
3. Sunder Lal, Adarsh & Pankaj(2021) Textbook of Community Medicine, 7th edi, CBS publishers and distributors.
4. Burhanuddin Nafeesi(1934)*Kulliyat e Nafeesi* (Urdu translation by Hkm. M. Kabiruddin), Idara Kitab us Shifa, New Delhi.
5. B.Sridhar Rao(2018),Principles of Community Medicine,6th Edition,Aitbs Publishers

Course Code: MDT301 Title of the Course: *Asbabe Sitta Zarooriya aur Ilaqi Nazariyat. Jadeed izafaat (Six essentials of life and it's applied aspects with latest additions)*

L-T-P: 60(L), 20(T) Total=80 Credits: NA

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

After completing this Course, the students should be able to:

CLO1: Identify the importance of *Asbab Sitta Zarooriya*.(Understand)

CLO2: Recognise the practical application of *Asbab Sitta Zarooriya* in day to day life.(Understand)

CLO3: Demonstrate the knowledge of recent advances in the field of Preventive and Social Medicine.(apply)

CLO4: Explain the effect of *Asbab Sitta Zarooriya* on *Mizaj* and *Akhlat*. (Evaluate)

CLO5: Appraise the interaction of *Maholiyat* and *Aloodgi* with *Asbab Sitta Zarooriya*.(Evaluate)

**Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	2	1	1	3	3	3	3	3	2	3	3
CLO 2	1	3	2	2	3	2	3	2	2	3	3	3	3	2	3	3
CLO 3	3	3	1	3	2	2	3	3	3	3	3	2	1	2	3	3
CLO 4	2	3	3	2	1	2	3	3	2	3	2	3	2	2	3	3
CLO 5	1	3	3	3	2	1	3	3	2	2	3	3	3	1	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit-1: 30 hours

Asbab-c-Sitta Zarooriya aur Uske Ilaqi Nazariyaat(Six Essentials of Life and Their Applied Aspects)

Definition

Importance

Six Essentials:

- *Hawa* (Air)
- *Makool wa Mashroob* (Eating and Drinking)
- *Harkat wa Sukoon-e-Badni* (Bodily Movements and Repose)
- *Harkat wa Sukoon-e-Nafsani* (Psychic Movements and Rest)
- *Naom wa Yaqza* (Sleep and Wakefulness)
- *Ehtabaas wa Istafraagh* (Retention and Excretion)

Asbab-e-Sitta Zarooriya aur Mizaaaj
Asbab-e-Sitta Zarooriya aur Akhlaat
Asbab-e-Sitta Zarooriya aur Mahauliyaat
Asbab-é-Sitta Zarooriya aur Aaloodgi
Asbab-e-Sitta Zarooriya Ke Ilaqi.Pehloo

Unit-2: 30 hours

Tahaffuzi wa Samaji Tib Mein Jadeed Izaafaat(Advancements in Preventive & Social Medicine)

Birth of Preventive Medicine and its Development

Social Medicine and its Development

Day-to-Day Advancements in Community Medicine

Reference Books:

1. K.Park(2021) Park's Textbook of Preventive and Social Medicine, 26th edition, Banarasidas Bhanot publishers.
2. Mahajan & Gupta(2013), Textbook of Preventive and Social Medicine, 4th edition, Jaypee publishers.
3. Sunder Lal, Adarsh & Pankaj(2021),Textbook of Community Medicine, 7th edi, CBS publishers and distributors.
4. B.Sridhar Rao(2018),Principles of Community Medicine,6th Edition,Aitbs Publishers
5. Syed Kamaluddin Husain Hamdani(2015),*Usool e-Tibb*,Qaumi Council baraye Farogh e Urdu Zaban
6. Burhanuddin Nafees(1934) *Kulliyat e Nafeesi* (Urdu translation by Hkm. M. Kabiruddin). Idara Kitab us Shifa, New Delhi.

Course Code: MDT302

Title of the Course: *Sehate Aama wa Khandani Behbood, Shakshi Hifzane Sehat, Peshawarana Amraz aur Sanati khatrat* (Public health and Family welfare, Personal hygiene, Occupational diseases and Industrial Hazards)

L-T-P: 60(L), 20(T) Total=80 Credits: NA

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

After completing this Course, the students should be able to:

CLO1: Recognise the understanding of National Demographic goals and ways to achieve them.(remember)

CLO2: Demonstrate the knowledge of Health aspects and sociology of Family planning.(apply)

CLO3: Appraise the various regional care strategies for different sections of population.(analyse)

CLO4: Analyse the importance of Occupational health and their preventive measures.(analyse)

CLO5: Assess the clinical importance of *Shakshi hifzane Sehat*.(evaluate)

**Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	2	3	3	2	1	1	3	3	3	3	3	3	3	3
CLO 2	1	2	2	2	3	2	3	2	2	2	3	3	3	2	3	3
CLO 3	3	3	1	3	2	2	3	3	3	3	3	2	1	2	3	3
CLO 4	2	3	1	2	1	2	3	3	2	2	3	3	2	2	3	3
CLO 5	1	3	3	3	2	1	3	3	2	3	3	3	2	1	3	2

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: 30 hours

• **SEHAT-E-AAMA**

Definition of Health and its dimensions

Factors maintaining General Health

Health Education

Approaches to Public Health

Adoption of new ideas and practices

Contents of Health education

Education of general public

Health Status and health Problems

Health care system

Tadabeer-eAtfal

Tadabeer -Balighaan

Tadabeer - ashaekh

Tadabeer -e Haamla

Propaganda of General Health

• ***KHANDAANI Behbood***

Definition

Basie Human Rights

Scope of Family Planning

Health aspects of Family Planning

- Women's Health
- Foetal Health
- Infant and Child Health

The Welfare Concept

Population Policy

National Demographic Goals

Ninth five year plan objectives

New revised population

Contraceptive Methods (Fertility regulating methods)

- Unani concept of contraception
- Modem concept of conception

Population education

Sociology of Family Planning

Voluntary Organizations

International level

National Family Welfare Progamme

Evolution of Family Planning

Unit 2: 30 hours

• ***SHAKHSI HIFZANE SEHAT:***

General Hygienic and Healthy Habits

Healthy Habits: Pertaining to Body Systems

- Oral Hygiene, Digestive, Respiratory, Circulatory and Urinary Systems, Eyes, Skin, Physical Activities, Sex Hygiene and Sex Education

Habit and Habitat

- ***PESHAWARANA AMRAAZ:***

Occupational Health

- Promotion and Protection of the Health of Workers
- Early Diagnosis-and Prompt Treatment,
- Rehabilitation.in.case of Disablement

Occupational Hazards

- Physical Hazards
- Chemical Hazards
- Biological Hazards
- Mechanical Hazards
- Psychological Hazards

Occupational Diseases: Pathogenesis, Clinical Features, Prevalence and Preventive measures

- Lead Poisoning
- Pneumoconiosis
- Diseases due to Mineral Dust: Silicosis, Asbestosis, Siderosis, Anthracosis
- Vegetable Dust: Byssinosis, Bagassosis, Tobaccosis, Farmers Lung

Preventive Measures of Occupational Diseases

- Health Promotion
- Specific Protection
- Early Diagnosis and Treatment
- Disability Limitation
- Rehabilitation
- Health Covers of Industrial Workers through Legislation

Reference Books:

1. K.Park(2021) Park's Textbook of Preventive and Social Medicine, 26th edi, Banarasidas Bhanot publishers.
2. Mahajan & Gupta(2013),Textbook of Preventive and Social Medicine, 4th edi, Jaypee publishers.
3. B.Sridhar Rao(2018),Principles of Community Medicine,6th Edition,Aitbs Publishers

4. Burhanuddin Nafees, *Kulliyat e Nafeesi* (Urdu translation by Hkm. M. Kabiruddin),(1934) Idara Kitab us Shifa, New Delhi.
5. Ibne Sina (1992), *Al Qanoon fil Tibb*, Jamia Hamdard, New Delhi.

Teaching-Learning Strategies in brief (4 to 5 sentences) (Same for all courses of MD-TST program)

- Learning through class lectures
- Learning by group discussion among peer groups
- Learning through open book discussions
- Learning through audio visual demonstration
- Learning through case studies and field studies

Assessment methods and weightages in brief (4 to 5 sentences) (Same for all courses of MD-TST program)

Assessment Methods:

- Objective and Descriptive questions
- Class presentations
- Written Assignments
- Extra curricular activities (social work, public awareness and surveillance activities)

Weightage of marks is as follows:

Theory: 100 marks, **Internal Assessment:** 25 marks, **Viva voice:** 75 marks

Total: 200 marks

**DOCTOR OF
MEDICINE
(MD)
(ILMUL ADVIA)**

NAME OF THE DEPARTMENT: ILMUL ADVIA

Vision Statement (Department Level):

To impart quality research training and teaching of Unani pharmacology, understanding and integrating the holistic and molecular approach of Unani drugs for betterment of system.

Mission Statements (3 to 4) (Department Level):

MS1: Theoretical and practical understanding of characteristics, mechanism and application of natural and modern drugs.

MS 2: To analyze and develop the infrastructure of research laboratories for better industrial growth.

MS 3: To inculcate the research aptitude in accordance with Unani paradigm that will be relevant to current biosciences in creating skilled professionals.

MS 4: Imparting knowledge about Unani classical text as well as pharmacological aspects of diseases and drugs.

Name of the Academic Program --MD ILMUL ADVIA

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Academic Programme (Kindly fill name of programme), students will be able to:

QD-1: To develop efficient, skilled and qualified researchers for academia and industry.

QD-2: To analyse and develop standardization techniques and /Screening methodologies for pharmacological activities on different animal models.

QD-3: To demonstrate communication skills to guide different groups of society about advantages and harms of medicines and drugs .

QD-4: To inculcate research aptitude for higher education and research.

QD-5: To display the competence and potential as efficient citizen to serve for better ment of society.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	3	3	3	3
QD-2	2	3	2	2
QD-3	2	2	3	2
QD-4	2	2	3	2
QD-5	2	2	3	3

Name of the Academic Program: MD ILMUL ADVIA

PROGRAM LEARNING OUTCOMES (PLOs) (12)

After completing this Course, the students should be able to:

- PLO-1:** Understand and evaluate the basic principles of Unani and modern pharmacology.
- PLO-2:** Inculcate the knowledge of fundamentals of drugs and medicines in management of health and disease.
- PLO-3:** Develop the understanding of nature of various classes of drugs and their applications.
- PLO-4:** Develop and apply holistic approach towards multidisciplinary research.
- PLO-5:** Identify the potential of modern and Unani drugs in their specific role in combating health issues.
- PLO-6:** Develop sensitization towards critical dose administration in correlation to their adverse effects.
- PLO-7:** Display excellent demonstrative, communicative, interpersonal and problem solving skills for solving regarding community's better health.
- PLO-8** Passion for developing research aptitude including self-learning employing modern resources.
- PLO-9:** Exhibit responsibility towards various cultures in and understanding role of traditional system of medicines.
- PLO-10:** Display and apply leadership and team work aptitude to work in private and government organizations.
- PLO-11:** Demonstrate the ability to play a valuable role in academics and nurturing the newer talents.
- PLO-12:** Develop analytical skills and inculcate the passion for research and development.

PROGRAM SPECIFIC OUTCOMES (PSOs)

(In case of specializations in each academic program, 2 to 4)

After completing this Course, the students should be able to:

- PSO-1** Design, develop and conduct research protocols regarding modified dosage forms pre-clinical studies for better understanding various pathological conditions.
- PSO-2** Identify, formulate and obtain solutions to the challenging problems in the interdisciplinary fields of traditional medicine using principles of Unani medicine.
- PSO-3** Commit and conform to professional ethics, responsibilities and norms in their professional and societal interactions.

PSO-4 Select and apply appropriate, advanced spectroscopic, chromatographic, other analytical techniques, qualitative & quantitative assessments etc. for standardizing the raw materials needed for conducting research.

PSO-5 Ability to do multidisciplinary research in the pharmaceutical industries and perform reverse pharmacology for validating claims of Unani physicians. Efficiently writing project reports as well as research publications in the context of emerging trends and technologies.

**Mapping of Program Learning Outcomes (PLOs)
With Qualification Descriptors (QDs)**

	QD-1	QD-2	QD-3	QD-4	QD-5
PLO-1	3	3	3	2	3
PLO-2	2	2	3	2	2
PLO-3	3	3	3	2	3
PLO-4	3	2	3	2	3
PLO-5	2	3	3	2	2
PLO-6	2	3	3	2	3
PLO-7	2	3	3	2	3
PLO-8	3	2	3	2	3
PLO-9	3	3	3	2	3
PLO-10	3	2	2	2	3
PLO-11	3	2	2	2	3
PLO-12	3	2	3	2	3
PSO-1	3	3	2	2	3
PSO-2	3	2	2	2	3
PSO-3	3	2	3	3	3
PSO-4	2	3	3	2	3

PSO-5	3	3	3	2	3
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COURSE DESIGN

Course Code: PAPER IV-Title of the Course: GENERAL, SYSTEMIC & EXPERIMENTAL PHARMACOLOGY

L-T-P...L=6, P=4 T= 7hours/week

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1: To grossly understand and apply the basics of pharmacology.

CLO-2: To develop multidisciplinary approach to apply principles of pharmacokinetics and pharmacodynamics of rugs for effective management of various disorders.

CLO-3: To analyze the importance of drugs in health and diseases and critically understand the responsibilities of pharmacologists and their role in community health.

CLO-4: To inculcate knowledge about pathologies of various diseases, available drugs for treatment and their application

CLO-5: To ethically practice, apply and demonstrate knowledge for personal, professional and social engagement.

CLO-6: To understand the value and use available resources for lifelong learning and carry out professional development for growth and advancement of science and pharmacology in specific.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4	PS O 5
CLO 1	3	2	3	3	3	2	2	3	3	3	3	2	3	3	3	2	3

CLO 2	3	3	3	2	3	3	3	3	3	2	2	2	2	3	3	2	3
CLO 3	3	3	3	2	3	3	2	2	3	3	3	3	2	3	3	2	3
CLO 4	2	3	3	2	2	3	3	3	2	3	2	3	2	3	2	2	3
CLO 5	3	2	3	2	3	2	3	3	3	2	3	2	3	3	3	2	3
CLO 6	3	2	3	2	3	2	3	3	2	2	2	3	2	3	3	2	3

Detailed Syllabus:

Unit 1: General Pharmacology

25 hours

1. Introduction to pharmacognosy, pharmacy, pharmacokinetics, pharmacodynamics, therapeutics, toxicology, pharmaceutics and clinical pharmacology
2. Routes of drug administration
3. Pharmacokinetics: Absorption, distribution, metabolism, excretion, bioavailability, half-life, dose response curve, ED50 and LD50.
4. Pharmacodynamics: Receptor theory of drug action, receptor families, receptor ligand binding and factors modifying drug action.
5. Pharmacovigilance: Drug interactions, adverse drug reactions, reporting and monitoring of ADR's.
6. Principles of Toxicology

Unit 2: Systemic Pharmacology

35 hours

- Autonomic Nervous system: Review of ANS and neurohumoral transmission, Sympathomimetic drugs, sympatholytic drugs, parasympathomimetic drugs, parasympatholytic drugs, anticholinesterase drugs.
- Central Nervous System: Sedatives and hypnotics, opioids, antiepileptics and antipsychotics.

- Cardiovascular System: Antihypertensive drugs, Drugs used in heart failure, anti-anginal drugs.

Unit 3: Miscellaneous

15 hours

- Diuretics
- NSAIDS
- Drugs used in Peptic ulcer
- Antidiabetics
- Corticosteroids

Unit 4: Experimental Pharmacology 25 hours

- Common laboratory animals, characteristics and experimental uses.
- Dose administration (oral and I.V) and withdrawal of blood samples
- Dose conversion factors
- Vehicles for animal administration
- Isolated tissue preparation
- Methods of rendering the animal's unconscious
- Anesthetics used in lab animals
- Basic equipment

Reference Books:

1. Rang H. P., Dale M. M., Ritter J. M., Flower R. J., Rang and Dale's Pharmacology. Churchill Livingstone Elsevier
1. Katzung B. G., Masters S. B., Trevor A. J., Basic and clinical pharmacology, Tata Mc Graw-Hill
2. Goodman and Gilman's, The Pharmacological Basis of Therapeutics
3. Marry Anne K. K., Lloyd Yee Y., Brian K. A., Robbin L.C., Joseph G. B., Wayne A. K., Bradley R.W., Applied Therapeutics, The Clinical use of Drugs, The Point Lippincott Williams & Wilkins
4. Mycek M.J, Gelnet S.B and Perper M.M. Lippincott's Illustrated Reviews- Pharmacology
5. K.D.Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
6. Sharma H. L., Sharma K. K., Principles of Pharmacology, Paras medical publisher
7. 8. Modern Pharmacology with clinical Applications, by Charles R.Craig & Robert,
8. Ghosh MN. Fundamentals of Experimental Pharmacology. Hilton & Company, Kolkata.
9. Kulkarni SK. Handbook of experimental pharmacology. VallabhPrakashan,

Teaching-Learning Strategies in brief

- Students will be encouraged to learn with practical learning through experiments.
- Group discussions and interactive sessions would be encouraged among students and faculty.
- Projects and presentations would be assigned for active involvement of students.
- Open ended questions by teachers and students.
- Internal tests and revisions

Assessment methods and weightage s in brief

Students will be assessed based on their performance (at a scale of 100 marks) in internal sessional/assessment and their annual/final assessment. Internal sessional would be for 25 marks and final assessment would be for 75 marks.

Course Code: MDI-201-& MDI-301 Title of the Course: **Qawanine Advia (Principles of Unani Pharmacology) and Advia Mufrada.**

L-T-P...L=8, P=6, hours/week.

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1: To grossly understand and apply the basics of Unani pharmacology.

CLO-2: To develop multidisciplinary approach to apply principles of pharmacology Unani for effective management of various disorders.

CLO-3: To analyze the importance of Advia Mufradeh (single Unani drugs) in maintaining health and thoroughly understand the responsibilities of pharmacologists and their role in community health.

CLO-4: To inculcate knowledge about part of the single drug used in pathologies of various diseases.

CLO-5: To ethically practice, apply and demonstrate knowledge for personal, professional and social engagement.

CLO-6: To understand the value and use available resources for lifelong learning and carry out professional development for growth and advancement of science and pharmacology in particular.

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4	PS O 5
CLO 1	3	2	3	3	3	2	2	3	3	3	3	2	3	3	3	2	3
CLO 2	3	3	3	2	3	3	3	3	3	2	2	2	2	3	3	2	3
CLO 3	3	3	3	2	3	3	2	2	3	3	3	3	2	3	3	2	3
CLO 4	2	3	3	2	2	3	3	3	2	3	2	3	2	3	2	2	3
CLO 5	3	2	3	2	3	2	3	3	3	2	3	2	3	3	3	2	3
CLO 6	3	2	3	2	3	2	3	3	2	2	2	3	2	3	3	2	3

Detailed Syllabus:

Paper-I

50 hours

- *Mavaleede salasa per mufassal tabsera, Neez Mabadiyate Advia ki ahmiyat aur zaroorat.*
- *Dawa, Ghiza, Zulkhassa, Dawae Mutlaq, Ghizae Mutlaq, Dawae Ghizaie aur Ghizae Dawaie per tafseeli maloomat.*
- *Mizaje Advia, Darjate Advia aur inke taayyun ka tahqeeqi jaiza.*
- *Ghair maroof Advia ki makhsoos imtiyazi khusoosiyat.*
- *Ghair maroof Advia ki maloomat ke zaraye, neez ghair maroof Advia ke tajarbat par tafseeli maloomat.*

Paper-II

50 hours

Shinakhat, Khawas wa Taseerate Advia

Description of Unani single drugs with Scientific names, *Mutaradifat aur unki Mahiyat,*

Mizaj, Afaal wa Khawas, Murakkabat, Istemal, Affale Khusoosi, Muzir, Musleh, Badal, Miqdar, Khurak wa Kimiavi Ajza used in following systems

- i. Advia mutalliqā Nizame Asab wa Dimagh.
- ii. Advia mutalliqā Nizame Tanaffus.
- iii. Advia mutalliqā Qalb wa Daurane Khoon.
- iv. Advia mutalliqā Nizame Baul.
- v. Advia mutalliqā Nizame Tavleed wa Tanasul.
- vi. Advia mutalliqā Jild wa Jarahat.
- vii. Advia mutalliqā Ain, Uzn, Anaf wa Halaq.
- viii. Advia mutalliqā Amraze Aamma,
- ix. Advia Mutafarriqa.
- x. Ghair Maroof/ Matrook Unani Advia
- xi. Bisehri, Chiksini, Sahdevi, Habbul-Quilquil, Huma, Khilla, Azriyun etc

Practicals

100 hours

Identification of the common *Advia Mufrada*, their Morphology, Histology, Constituents, Standardization and Quality Control Measures.

- Preparation of herbarium.
- *Mukhtalif nizamhaaye jismani per Advia ke asrat.*
- Tibbe Unani mein muravvaj Ashkaale Advia per jadeed nuqtae nazar se tabsera.
- *Tibbe Unani mein Abdale Advia ki ahmiyat, zaroorat aur muravvaj Abdale Advia ka tahqeeqi jaiza.*
- *Advia mufrada ki muddate hayat, unke usool aur tahaffuz ke bare mein tafseeli maloomat.*
- *Masalike Advia aur zaroori tajdeed.*
- *Advia ki muzir kaifiyat aur Islah ka tahqeeqi jaiza.*
- *Tibbi Akhlaqiyat wa hidayat barai Tahqeeqat*

Reference Books:

7. Razi, A.M.Z, (1980) “ Kitabul Abdal” C.C.R.U.M, New Delhi.
8. Razi, A.M.Z. (1997) “Kitabul Hawi”, Vol.Xth, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.

9. Razi, A.M.Z. (2002) "Kitabul Hawi", Vol.Xth, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi.
10. Rehman, S.Z., (1991). Kitabul Murakkabat, Publications division, Muslim University, Aligarh.
11. Jurjani, M.H. (1903) "Zakheera Khawarzaam Shahi" (Urdu Translated by Hakim Hadi Hussain Khan), Munshi Nawal Kishore, Lucknow.
12. Kabeeruddin, M., (1995). Bayaz-e-Kabeer, Vol. II, Hafiz Shoukat Book Depot, Gujarat.
13. Kabiruddin, H. (1951) "Ilajul Amraz" Sheikh Mohammad Bashir & Sons, Lahore, Pakistan.
14. Kabiruddin, H. (1951) "Makhzanul Mufradat" Sheikh Mohammad Bashir & Sons, Lahore, Pakistan.
15. Ibn-e-Baitar (1999) "Aljamiul Mufradat Al Advia Wal Aghzia" (Urdu), CCRUM, New Delhi, Vol.III.
16. Ibn-e-Rushd, A.W.M.B. (1987) "Kitabul Kulliyat" (urdu translation), CCRUM, Delhi.
17. Ibn-e-Sina (1927) "Alqanoon Fit Tibb" (urdu translation by Ghulam Hasnain Kantoori) Sheikh Mohammad Bashiir & sons, Lahore, Vol.II.
18. Ibn-e-Zohar, A.M. (1986) "Kitab al Taisir Fil Mudawat wa Tadabeer" (Urdu Translation by CCRUM, Ministry of Health and Family Welfare, Govt. of India.
19. Khan, A, (1303) H "Muheetul Azam" Dar matba nizami waqah Kanpur.
20. Khan, A, (1992) H "Qarabadeen Azam" Ajaz publicating House daryagunj New delhi
21. Khan, H.A. (1996) "Qarabadeen-e-Azam" (Urdu translation by Molvi Azmat Ali), Aijaz Publishing House.
22. Khan, H.A. (2000) "Haziq" Beeswein Sadi Publications (Pvt) Ltd, New Delhi.
23. Khan, M.A. (1940) "Ikseer-e Azam" (Urdu translation by Kabiruddin), Tibbi Compony, Rawalpindi, Pakistan.
24. Farha et al 2005, Classification of Unani Drugs, Maktaba Eshaatul Quran', Delhi.
25. Kritikar, K.R. Basu, B.D. 1993, Indiaan Medicinal Plants,2nd Edition, International Book Distributions, Rajpur road, Dehradun, India.
26. Nadkarni, 2000, The Indian Materia Medica, Bombay, Popular Prakashan, Pvt.Ltd, Bombay
27. K.D Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
28. Katzung BD, Masters SB, Trevor AJ, basic and Clinical Pharmacology, Tata Mc Graw Hill
29. Sharma HL, Sharma KK. Principles of Pharmacology, Paras Medical Publisher

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Students may be practical experience for Advia Mufradeh
2. In the group sessions and discussions would be encouraged.
3. Frequent question answer sessions will be incorporated.

Assessment methods and weightages in brief (4 to 5 sentences)

- Final exams are of 100 marks.
- Internal sessionals will be for 25 marks and final term will be of for 75 marks.
- Three sessionals would be conducted and best two will be counted.

Course Code: MDI-101 & MDI-104-Title of the Course: ...**Wasful Aqaqeer**
(Pharmacognosy) &Standardisation of Unani Drugs

L-T-P...L= 7, P=6 T=4 hour/week

(L=Lecture hours, T=Tutorial hours, P= Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1 Describe the history and scope of Pharmacognosy & Standarizatiuon of Unani drugs.

CLO-2 Describe the cultivation, collection, processing, storage and conservation of medicinal plants.

CLO-3 Describe the morphology and microscopy of different plant parts.

CLO-4 Describe different types of secondary metabolites, (Alkaloids, Glycosides, Essential oils, Flavonoids, Resins &tannins), standarization their general properties, classification, and test for identification &isolation techniques.

CLO-5 Describe the characteristic features of certain medicinally useful families.

CLO-6 Describe the pharmacognostical, appraisal of secondary metabolite containing drug.

**Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4	PS O 5
CLO 1	3	2	3	3	3	2	2	3	3	3	3	2	3	3	3	2	3
CLO 2	3	3	3	2	3	3	3	3	3	2	2	2	2	3	3	2	3
CLO 3	3	3	3	2	3	3	2	2	3	3	3	3	2	3	3	2	3
CLO 4	2	3	3	2	2	3	3	3	2	3	2	3	2	3	2	2	3
CLO 5	3	2	3	2	3	2	3	3	3	2	3	2	3	3	3	2	3
CLO 6	3	2	3	2	3	2	3	3	2	2	2	3	2	3	3	2	3

Detailed Syllabus:

Paper-I

50 hours

Ilmul wasful Aqaqeer (Pharmacognosy)

- Introduction to pharmacognosy and its scope
- Pharmacognostical methods used to establish the identity and purity of herbal drugs
- Plant Nomenclature.
- Classification of Plant Kingdom.
- Cultivation of medicinal plants, Good agricultural and collection practices,

- Introduction to plant tissue culture
- Characteristic features of certain medicinally useful families

- (a) Solanaeae (*Datura stramonium*, *Solanum nigrum*.)
- (b) Apocynaceae (*Rauwolfia serpentina*, *Wrightia tinctoria*)
- (c) Papaveraceae (*Papaver somniferum*)
- (d) Liliaceae (*Colchicum luteum*, *Aloe vera*.)
- (e) Leguminosae (*Trigonella foenum*, *Acacia arabica*)
- (f) Umbelliferae (*Coriandrum sativum*, *Ferula asafoetida*)
- (g) Malveceae (*Hibiscus rosa sinensis*, *Althaea officinalis*)
- (h) Euphorbiaceae (*Ricinus communis*.)
- (i) Compositae (*Artemisia absinthium*, *Chicorium intybus*)
- (j) Asclepiadaceae (*Calotropis procera*)

Drying and storage of drugs.

Deterioration of stored drugs.

Identification of crude drugs

- (a) Morphological Studies
- (b) Anatomical Studies
- (i) Microtomy
- (ii) Powder study
- (iii) Quantitative Microscopy

(a) Stomatal no, Stomatal index, Palisade ratio, Vein islet no.

Alkaloids and alkaloid containing drugs

- (a) Kuchla
- (b) Suranjan
- (c) Opium
- (d) Ephedra
- (e) Datura
- (f) Qinnab
- (g) Asrol

Glycosides and glycoside containing drugs

- (a) Revand
- (b) Senna
- (c) Sibr

- (d) Aslussoos
- (e) Digitalis
- (f) Ushba

Volatile oil containing drugs

- (a) Badyan
- (b) Rehan
- (c) Zeera
- (d) Darchini
- (e) AnisoonAniseed
- (f) Ustokhuddus
- (g) Jaiphal

Flavonoid containing drugs

- (a) Aftimoon
- (b) Mako
- (c) Kasni
- (d) Kabab chini

Fixed oil containing drugs

- (b) Badam
- (c) Zatoon
- (d) Kunjad
- (e) Baidinjeer
- (f) Katan
- (g) Chalmogra

Tannin containing drugs

- (a) Amla
- (b) Mazoo
- (c) Kakrasinghi
- (d) Main khurd

Drugs of animal origin

- (a) Sadaf
- (b) Marwareed
- (c) Marjan
- (d) Saresham Mahi
- (e) Jund bedastar

Practicals

100 hours

- Organoleptic identification of ten medicinal plants
- Powder identification of *Sena*, *Aslossoos*, *Kishnez*, *Revand*
- Morphological identification of five families
- Anatomical characteristics and dissection of root and stem of two medicinal plants
- Floral formula and floral diagram of five medicinal plants
- Determination of Alkaloids, Phenols, steroids, terpenes, glycoside, saponins, proteins, tannins, reducing sugar, non reducing sugar, Xanthoproteins, resins, vitamins, crude fibres, phosphate, iron, sulphur, calcium, aluminium, nitrogen.
- Tests for microbial contamination.

Paper-II

50 hours

Standardisation of Unani Drugs

- Aims and Objectives of Standardisation
- Standardisation of Herbal, Mineral, and Animal origin drugs
- Physical Standardisation
 - (a) Moisture content
 - (b) Viscosity
 - (c) Melting point
 - (d) Solubility
 - (e) Optical rotation
 - (f) Refractive index
 - (g) Ash values
 - (h) Extractive values
 - (i) pH value
- **Chemical standardisation**
 - (a) Quantitative Chemical Tests.
 - (i) Acid value

- (ii) Ester value
- (iii) Peroxide value
- (iv) Iodine value
- (v) Hydroxyl value
- (vi) Saponification value

(b) Qualitative Chemical Tests for:

- (i) Alkaloids
- (ii) Carbohydrates
- (iii) Glycosides Saponins Phenols Resins
- (iv) Esters
- (v) Alcohol
- (vi) Acids
- (vii) Volatile oil
- (viii) Fats
- (ix) Fixed oils

· **Analytical methods in drug analysis**

(a) Sublimation

- (b) Distillation
- (c) Methods of separation and isolation

(d) Chromatography

- (i) Types, aims and objectives.
- (ii) Thin layer chromatography
- (iii) Paper Chromatography
- (iv) Column Chromatography.
- (v) Liquid Chromatography.
- (vi) Gas Chromatography.
- (e) HPLC, HPTLC, Mass Spectroscopy,

(f) General description of electrophoresis

(g) Spectroscopy: UV and flame photometry, Atomic Absorption Spectroscopy

· **Quality control of single drugs of Unani Medicine**

(a) Adulteration of drugs

(b) Aflatoxin contamination

(c) Factors affecting quality of drugs

(d) Aflotoxins

(e) Heavy Metals

(f) GMP, GLP, SOP

· **Standardisation of compound formulations**

(Arq, Majoon, Safoof, Qurs and other dosage forms)

(a) Process standardisation.

(b) Product standardisation.

(c) Stability studies and Shelf life

· **PRACTICALS**

100 hours

Practical demonstration of

(a) Total ash value

(b) Acid soluble, acid insoluble ash.

(c) Water soluble, water insoluble ash.

(d) Sulphated ash values.

(c) Determination of moisture content.

(d) Determination of extractive values.

(e) Determination of Acid values, iodine value, peroxide value, saponin value, ester value
hydroxyl value.

(f) Determination of refractive index.

(g) Determination of R_f value by TLC.

Reference Books:

1. Mohammad Ali, Textbook of Pharmacognosy
2. Trease And Evans Pharmacognosy by WC Evans
3. S. B Gokhale, CK Kokate, AP Purohit. A text book of Pharmacogy, Nirali Prakashan
4. JS Quadry, Text book of pharmacognosy.
5. **Ibn-e-Baitar (1999)** “Aljamiul Mufradat Al Advia Wal Aghzia” (Urdu), CCRUM, New Delhi, Vol.III
6. **Ibn-e-Rushd, A.W.M.B. (1987)** “Kitabul Kulliyat” (urdu translation), CCRUM, Delhi,
7. **Ibn-e-Sina (1927)** “Alqanoon Fit Tibb” (urdu translation by Ghulam Hasnain Kantoori) Sheikh Mohammad Bashiir & sons, Lahore, Vol.II
8. **Razi, A.M.Z, (1980)** “ Kitabul Abdal” C.C.R.U.M, New Delhi p-65
9. **Razi, A.M.Z. (1997)** “Kitabul Hawi”, Vol.Xth, Central Council for Research in Unani Medicine(CCRUM), Ministry of Health and Family Welfare, Govt. of India, New Delhi
10. **Ali, M.Dr. (1993)** “ Text Book of Pharmacognosy” CBS publishers & distributors New Delhi
11. **Ali, M.(2008)** “ Pharamacognosy (Pharmacognosy & Phytochemistry) vol. I ”CBS publishers & distributors New Delhi. Banglore (India)
12. **Anonymous (1956)** “The Wealth of India” (Raw Materials) Publications & Information Directorate, Council of Scientific & Industrial Research (CSIR), New Delhi, Vol. 1V: F-G p.20-21
13. **Anonymous (1992)** “The Wealth of India” (Raw Materials) Publications & Information Directorate, Council of Scientific & Industrial Research (CSIR), New Delhi, Vol. 3:
14. **Ansari, S.H. (2008-09)** “Essentials Of Pharmacology” Birla Publications Pvt. Ltd. Shahdara, Delhi

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Students may be given practical experience for Phramacognosy and standardization techniques/parameters of Unani drugs.
2. In the group sessions and discussions would be encouraged.
3. Frequent question answer sessions will be incorporated.

Assessment methods and weightages in brief (4 to 5 sentences)

- Final exams are of 100 marks.
- Internal sessionals will be for 25 marks and final term will be of for 75 marks.
- Three sessionals would be conducted and best two will be counted.

PRE TIB

NAME OF THE DEPARTMENT: KULLIYAT

Vision Statement (Department Level):

To promote the Unani system of Medicine through academic and research endeavors and to align it with contemporary health sciences without affecting its basic structures.

Mission Statements (3 to 4) (Department Level):

MS1: To Impart quality education of Fundamentals of Unani medicine to Undergraduate students so they can understand the foundations and uniqueness of Unani Medicine and to give them confidence to become exceptional clinicians & researchers of Unani Medicine.

MS 2: To provide latest Laboratory and Research methods to improve knowledge.

MS 3: To develop connections between ancient Unani Medicine's wisdom and contemporary health sciences through research.

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Pre-Tib , students will be able to:

QD-1 Demonstrate In-depth and profound knowledge of different branches of Science like Physics, Chemistry, Zoology & Botany.

QD-2 Become proficient in English language and expert in basic sciences to understand the subjects taught in BUMS Programme.

QD-3 Demonstrate team work and solve problems they will be facing in BUMS and afterwards.

QD-4 Show convergent thinking for evaluation of the theories of basic sciences and their use in understanding BUMS programme.

QD-5 Demonstrate the ability to be a devoted and committed lifelong learner through self directed learning to become a great clinician and researcher in future after completing BUMS Programme.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	2	3	3	2
QD-2	3	3	3	3
QD-3	3	3	3	3
QD-4	3	3	3	3
QD-5	3	3	3	3

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

PROGRAM LEARNING OUTCOMES (PLOs) (12)

After completing this Course, the students should be able to

PLO-1 Evaluate and assess the basic sciences to understand the subjects of Unani medicine.

PLO-2 Apply the knowledge of Biological Sciences to understand the diseases and herbal drugs used in Unani Medicine.

PLO-3 Develop the understanding of concepts and theories of Unani Medicine with the help of basic sciences like Physics, Chemistry, Botany and Zoology.

PLO-4 Develop efficiency in reading and writing of English language.

PLO-5 Practice theories and concepts of basic sciences to understand philosophy the of Unani Medicine.

PLO-6 Demonstrate capability to work effectively in a team to manage different roles & responsibilities to become a great Unani Physician in future.

PLO-7 Display excellent interpersonal and problem solving skills for solving various problem coming in future BUMS course.

PLO-8 Exhibit the passion for self learning and research using modern tools and techniques.

PLO-9 Display the understanding of other contemporary sciences related to Unani Medicine and show responsiveness to cultural diversity.

PLO-10 Apply the principles basic sciences in future BUMS Course and at personal level.

PLO-11 Demonstrate the ability to communicate clearly with patients and peers.

PLO-12 Inculcate the passion for higher studies in Unani medicine.

**Mapping of Program Learning Outcomes (PLOs)
With Qualification Descriptors (QDs)**

	QD-1	QD-2	QD-3	QD-4	QD-5
PLO-1	3	2	2	2	2
PLO-2	3	2	2	2	2
PLO-3	3	2	2	2	2
PLO-4	2	3	2	2	2
PLO-5	3	2	2	3	3
PLO-6	2	2	3	2	2
PLO-7	2	2	3	3	3
PLO-8	3	3	3	2	3
PLO-9	3	3	3	3	3
PLO-10	3	2	2	2	3
PLO-11	2	3	2	3	2
PLO-12 PSO-1 PSO-2 PSO-3 PSO-4	2	2	2	2	3

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

COURSE DESIGN

Course Code:PTB-101

Title of the Course: Tabaiyat (Physics)

L-T-P- 100+ 100

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to

CLO-1 Understand various systems of measurement of physical quantities.(Understand)

CLO-2 Apply Vernier Calipers and Screw Gauge for the measurement of small lengths. (Apply)

CLO-3 Learn simple mechanical concepts as velocity, acceleration, force, momentum etc.
(Understand)

CLO-4 Apply the principles of heat, temperature etc. to working of thermometers. (Apply)

CLO-5 Understand some optical phenomena as reflection, refraction and dispersion of light.

(Understand)

**Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 2	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 3	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 4	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 5	3	3	3	1	2	2	3	3	2	2	1	2				

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1: Systems of units, Measurement of mass, Construction and working of Vernier Calliper and Screw Gauge, Force, Newton's laws of motion, Volume, mass and weight, Viscosity, Surface Tension.

Unit 2: Construction and working of barometer, Heat and temperature, Specific heat and water equivalent, Specific heat of solid and liquid, Latent heat of fusion, Latent heat of vaporization,

Unit 3: Types of thermometers, Light: General discussion, Types of mirrors and image formation, Types of lenses and image formation, Convergence and divergence of light, Laws of reflection, Laws of refraction.

Unit 4: Spectrum of light, Sound, Reflection of Sound, Speed of sound, General behavior of electricity, Electric current and its measurement, Conductors and insulators, Conductivity and resistance,

Unit 5: Series and parallel combination of resistors, X-rays, Generation of X-rays, Characteristics of X-rays, Radioactivity, General characteristics of alpha, beta and gamma rays.

Reference Books:

1. Science and Technology class IX NCERT
2. Science and Technology class X NCERT

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Encourage participation of students in learning.
2. Connect the subject matter with the student's everyday life.
3. Encourage the spirit of questioning by the students.
4. Arrange student friendly study material and other learning resources.
5. Create friendly environment conducive for learning.

Assessment methods and weightages in brief (4 to 5 sentences)

1. Two sessional examinations.
2. Assignments.
3. Oral quizzes in the class.
4. End semester examination.
5. **Internal Assessment: 25 Marks, End Semester Examination :75 Marks &Total Marks: 100.**

Course Code:PTB-102

Title of the Course: Kimiya (Chemistry)

L-T-P- 100+ 100

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE OUTCOMES (COs)

(5 to 8 in case 3 or 4 credit courses)

After completing this Course, the students should be able to

CO-1 Understand the formation of hydrogen ,oxygen and other related gases (Understand)

CO-2 Understand the chemical reactions going on inside the human body in future BUMS course(Understand)

CO-3 Distinguish between metals and non metals and their compound formation (Apply)

CO-4 Analyze microscopic chemistry of matter.(Analyze)

CO-5 Interpret structural properties of atoms(Evaluate)

**Mapping of Course Outcomes (COs) with Program Outcomes (POs)
and Program Specific Outcomes (PSOs)**

	PLO 1	PLO 2	PLO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PO 1	PO 2	PO 3	PSO 4
CLO 1	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 2	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 3	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 4	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 5	3	3	3	1	2	2	3	3	2	2	1	2				

Each Course Outcome (CO) may be mapped with one or more Program Outcomes (POs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

Detailed Syllabus:

Unit 1: Some basic concepts.

Element, Compound, Mixture, Physical and Chemical change, Separation of parts of mixture, Sublimation, Extraction, Evaporation Condensation.

PRACTICAL

Laws and principles of work in laboratory

Different ways of washing glass.

The ways of handling chemicals and glass wares

Ways of separation of solid and liquid mixture

Ways of separation of Soluble & Insoluble

Unit 2: Atomic Structure

Element, Compound, Mixture, Atom and its structure, Molecule, Valency, Electrovalent & Covalent compound, Molecular Weight, Atomic Weight, Isotopes, Equivalent Weight, Isobars, isotopes.

PRACTICAL

Separation of soluble

Separation of soluble liquid with each other

Separation of insoluble liquids

Unit 3 Metals And Non Metals

Salt and its characteristics. Classification of element. Main classification of metals. Study of salt. Common features of Copper, Sodium and Silver. Common knowledge of Zinc, Mercury, Iron, Aluminium, Calcium and its general study. General knowledge of Sodium chloride, Sodium hydroxide, Sodium carbonate and Hydroxide, Sodium bicarbonate. General knowledge of Mercury, Iron oxide Ferris sulfate, and Copper sulphate.

PRACTICAL

Ways of making Gas in laboratory and characters of Hydrogen, Oxygen, Sulphur dioxide and Amonia

Unit 4. Hydrogen

General knowledge of making Hydrogen and it's features. General knowledge of making Oxygen and Ozone. Common explanation of Ammonium Chloride and Amonia. Study of water and Carbon dioxide. Common features of Hydrochloric acid. Common features of Sulphuric Acid and Nitric Acid. Sulphur and it's compound. Characteristics of Bleaching Powder. Ways of making Hydrogen Sulphide and it's characteristics. Phosphorus and it's compound. Slica and Glass. Plaster of Paris, Magnesium Sulphate. Ways of making Hydrogen Peroxide and it's characteristics. Ways of making Iodine and characteristics.

PRACTICAL

Interaction of plants

Unit 5

کچھ یونانی ادویہ کا تعارفی مطالعہ گل ارمنی گل، شاخ مرجان، موتی، شنگرف، کالا نمک زمررد سبز، زہرہ مہرا، بنسلوچن عقیق، لاجورد، مروارید، موریہ، نیلم، یاقوت، سر دار چکنا، رسکپور، گندھک، ہڑتال، میٹھا، ورسنگ گیرو، خبث الحديد، نوشادر، نمک سانبہر، مردار سنگ کشتہ طلا، کشتہ نقرہ، کشتہ قلعی، کشتہ فولاد کشتہ سرشار اور غیر شرسار ہائڈروکاربن کا عام تعارف میتھین، ایتھین.

PRACTICAL ،

پانی کا ڈیسٹیلیشن
آرگینک سولویٹ کے آمیزہ کا فریکشنل ڈیسٹیلیشن
پانی کے اندر سالٹس سولوشن کا ڈیسٹیلیشن
سادے غیر نامیاتی ایسڈ ریڈیکس کی اینالیسیس

UNIT-6

بنانے کے طریقے میتھائل الکوحل اور ایتھائل الکوحل کی تیاری ایتھنز کلوروفارم کی صرف خصوصیات ایسیٹک ایسڈ، فارملین اور گلسرین کی عام خصوصیات فینول، ٹارٹیرک ایسڈ اور سائٹرک ایسڈ الکوحل، ایلڈی ہائڈس، کیٹونس، کاربوکزیلک ایسڈ کا تعارفی بیان اور اسکے افعال پروٹینس اور فیٹس کا بنیادی مطالعہ گلائکو سائڈس گلائکوسائڈس اور کارڈیک گلائکوسائڈس پیورینس وٹامنس اور ہارمونس اینزائمس، کاربوہائیڈریٹس، اور اسٹیروئڈس ریزنس، ویکس، وولا ٹائل آئل؛ ور ہیموگلوبن کلوروفل، یوریا اور یورک ایسڈ کا تعارفی بیان

PRACTICAL.

کلورائیڈ، برومائڈ اور آئیوڈائیڈ

Reference Books:

1. University chemistry, by B. H. Mahan
2. Chemistry: Principles and Applications, by M. J. Sienko and R. A. Plane
3. Fundamentals of Molecular Spectroscopy, by C. N. Banwell
4. Engineering Chemistry (NPTEL Web-book), by B. L. Tembe, Kamaluddin and M. S. Krishnan
5. Physical Chemistry, by P. W. Atkins
6. Organic Chemistry: Structure and Function by K. P. C. Vollhardt and N. E. Schore, 5th Edition <http://bcs.whfreeman.com/vollhardtschore5e/default.asp>

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Learning through discussion among the peer group
- Learning through Case Studies
- Group Projects One Minute Paper during the classroom interaction
- Open ended questions by teacher
- Open ended questions from student

Assessment methods and weightages in brief (4 to 5 sentences)

1. Two sessional examinations.
 2. Assignments.
 3. Oral quizzes in the class.
 4. End semester examination.
- 5. Internal Assessment: 25 Marks, End Semester Examination :75 Marks & Total Marks: 100.**

Course Code:PTB-103

Title of the Course: Nabatiyat (Botany)

L-T-P- 100+ 100

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Understand the classification and various parts of the plants.(Understand)

CLO-2 Identify the medicinal Plants used in Unani Medicine. (Understand)

CLO-3 Understand the microscopic structure of leaves, Stems, Roots etc.(Understand)

CLO-4 Describe about the various types of diseases that are caused by lower plants.(Understand and apply)

CLO-5 Evaluate the importance of plants parts used in Unani Medicine.(Evaluate)

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 2	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 3	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 4	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 5	3	3	3	1	2	2	3	3	2	2	1	2				

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1- General introduction of plants, structure of plants, branches of plants, importance of plants, difference between animals & plants, parts of flowering plants, introduction of root, stem and leaves

Unit-2- Importance of Inflorescence, flowering, flower, flower and its parts, pollination, cross pollination & self pollination, fertilization.

Unit-3- types of fruits, dispersion of seeds and fruits, Introduction, types and environment of Maize, Peas & Castor, Structure and functions of plant cell, Plant tissue, its types and tissue system.

Unit 4- Classification of : Dicotyledon and Monocotyledon Plants:

Ranunculaceae, Cruciferae, Solanaceae, Malvaceae, Leguminosae, Liliaceae, Garamineae

Unit 5- General introduction and economic importance of plants: Elaichi Khurd, Chai ka paudha, Coffee ka paudha, Daarcheeni, Kafoor and Karanfal.

Medicinal plants and plants of economic importance: Sources and uses: Ajwain desi, Ajwain Khurasani, Afyun, Bhang, Dhatura, Azaraqi, Quinon ka paudha & Asrol.

Unit 6- Amaltas, Aslussoos, Kishneez, Kasni, Inbus-salab, Introduction of lower plants Algea, Ocsillatoria , Ulothrix, Spirogyra, Fungi, Mucor, Yeast, Penicilium, Bacteria & Viruses.

Practical- Record file and slide preparation of organs of abovementioned topics.

Reference Books:

1. A.C. Dutta: A Classbook of Botany
2. Unani Advia Mufradah: Hakim Sayyed Saifuddin Ali

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Encourage participation of students in learning.
2. Connect the subject matter with the student's everyday life.
3. Encourage the spirit of questioning by the students.
4. Arrange student friendly study material and other learning resources.
5. Create friendly environment conducive for learning.

Assessment methods and weightages in brief (4 to 5 sentences)

1. Two sessional examinations.
2. Assignments.
3. Oral quizzes in the class.
4. End semester examination.

5. Internal Assessment: 25 Marks, End Semester Examination :75 Marks &Total Marks: 100.

Course Code:PTB-104

Title of the Course: Haiwaniyat(Zoology)

L-T-P- 100+100

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1 Define the terminologies related to Zoology.(Understand)

CLO-2 Understand the organ systems and their functions. (Understand)

CLO-3 Identify and differentiate the physiological and anatomical aspects of different animals. (Understand)

CLO-4 Understand the importance of animals and their role health and disease. (Understand)

CLO-5 Describe the disease causing bacteria, parasites, virus & fungi etc and diseases caused by them. (Understand & Apply)

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PSO 4
CLO 1	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 2	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 3	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 4	3	3	3	1	2	2	3	3	2	2	1	2				
CLO 5	3	3	3	1	2	2	3	3	2	2	1	2				

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1. Introduction to animal Kingdom, Types of Animals, Classification of animals, Microscopic study of cell, Structure and functions of cell, Cell division

Unit 2- Mitotic & Meiotic cell division, Internal organs of frog, Various organ systems of Rabbit: Digestive system, Excretory system

Unit 3- Reproductive system, Respiratory system, Sensory organs, Endocrine & Exocrine system: Pancreas, Alimentary canal, thyroid gland, parathyroid gland, pineal gland

Unit 4- Thymus gland, Adrenal gland, Gonads-Testes and Ovaries, Disease producing protozoan and diseases caused by them, General introduction of sponges and their economic importance, General introduction of coelentrates and their economic importance

Unit 5- General introduction of disease causing parasites, general introduction of disease causing molluscs, Economic importance of arthropods

Unit 6- Difference between poisonous and non-poisonous snakes, Disease caused by bacteria, Disease caused by bacteria

Practical- Record file, and slide preparation of organs of abovementioned topics.

Reference Books:

1. Animal Biology: Dr. H.C.Nigam
2. A text Book of Animal Biology-R.L Kottal
3. Science & Technology in Urdu Version

Teaching-Learning Strategies in brief (4 to 5 sentences)

1. Encourage participation of students in learning.
2. Connect the subject matter with the student's everyday life.
3. Encourage the spirit of questioning by the students.
4. Arrange student friendly study material and other learning resources.
5. Create friendly environment conducive for learning.

Assessment methods and weightages in brief (4 to 5 sentences)

1. Two sessional examinations.
2. Assignments.
3. Oral quizzes in the class.
4. End semester examination.

5. Internal Assessment: 25 Marks, End Semester Examination :75 Marks &Total Marks: 100.

Course Code:PTB-105

Title of the Course: English Language

L-T-P- 100

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE OUTCOMES (COs)

After completing this course, the students should be able to:

CO 1: To develop competence in communication skills related to the production & presentation of messages in multiple formats & understand the importance of sentence structure. (Understand & Apply)

CO 2: To develop the writing skills of the students so that they are capable of communicating efficiently. (Understand & Apply)

CO 3: To familiarize students with the basics of the English language and help them to learn to identify language structures for correct English usage. . (Understand & Apply)

CO 4: To familiarize students with the basics of the English language and help them to learn to identify language structures for correct English usage. . (Understand & Apply)

CO 5: To enhance vocabulary skills and make students fluent, thereby improving receptive and expressive skills. . (Understand & Apply)

Mapping of Course Outcome (Cos) with Program Outcomes (POs) & Program Specific Outcomes (PSOs)

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PSO 1	PSO 2	PSO 3	P
CLO1	2	1	1	3	3	3	3	2	1	1	3	2				
CLO2	2	1	1	3	3	3	3	2	1	1	3	2				
CLO3	2	1	1	3	3	3	3	2	1	1	3	2				
CLO4	2	1	1	3	3	3	3	2	1	1	3	2				
CLO5	2	1	1	3	3	3	3	2	1	1	3	2				

Each Course Outcome (CO) may be mapped with one or more Program Outcomes (POs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low'-level' mapping.

Detailed Syllabus:

Unit 1: FIRST TERM

Tenses with special reference to simple, progressive and perfect

Determiners, pronouns,

Reported speech

Modals

Types of sentences: Affirmative, Negative, interrogative

Active and passive voice

Unit-2: SECOND TERM

Linkers

Punctuations

Paragraph writing to build idea, to describe an experience or to give personal view of an event or happening.

Essay writing: narrative, argumentative and reflective

Precis writing

Unit-3: THIRD TERM

Guided Reading - A collection of short stories

Mechanics of Writing

Basics tasks of composition

The overall organization of larger pieces of writing

Reference Books:

- Hasson, Gill. Brilliant Communication Skills. Great Britain: Pearson. Education, 2012.
- Practical English Usage, Michael Swan
- Exercises in Spoken English, Oxford University Press
- English Grammar Reference Book: Grammar and Error Correction Guide and Phrasal Verb Book by Jacquelin Mervin

Teaching-Learning Strategies in brief:

1. Ability to handle the interview process confidently
2. Communicate fluently and sustain comprehension of an extended discourse.
3. Demonstrate ability to interpret texts and observe the rules of good writing.
4. To communicate contextually in specific personal and professional situations with courtesy.
5. To empower students to carry out day to day communication at the workplace by adequate understanding of various types of communication to facilitate efficient interpersonal communication.
6. Students will be able to navigate cross cultural encounters in a global economy. Facilitate students to develop learning to construct and deliver messages that incorporate the appropriate use of organizing content, language, vocabulary, kinesics, eye contact, appearance, visual aids, and time constraints

Assessment methods and weightages in brief:

1. By taking two sessional examinations.
2. By giving assignments.
3. By conducting class tests.

4. By taking semester examination.

5. **Internal assessment (25 Marks) & Semester Examination (75 Marks) & Total Marks-100**

DIPLOMA IN UNANI PHARMACY

NAME OF THE DEPARTMENT: ILMUL SAIDLA

Vision Statement (Department Level):

To produce trained Unani pharmacists.

Mission Statements (3 to 4) (Department Level):

MS1: Transferring the Art and knowledge of *Dawasazi* in all aspects.

MS 2: To enable the students to prepare quality formulations.

MS 3: To develop skills for the establishment of Unani pharmaceutical industry.

MS 4: To produce trained and qualified *Attars*/Unani pharmacist.

Name of the Academic Program: DIPLOMA IN UNANI PHARMACY

QUALIFICATION DESCRIPTORS (QDs)

Upon the completion of Academic Programme (Kindly fill name of programme), students will be able to:

QD-1 Demonstrate fundamental knowledge of different branches of *Unani* system of medicine like Kulliyat, Anatomy and Physiology etc.

QD-2 Demonstrate in-depth knowledge of *Ilmul Saidla* and *murakkabat*.

QD-3 Become proficient and expert *Unani* pharmacist.

QD-4 Show convergent thinking for evaluation of the theories and practices of *Unani* pharmacy on modern scientific parameters and solving health related concerns

QD-5 Demonstrate team work and leadership skills to inspire, motivate and evaluate and solve interests of common causes of community health problems.

Mapping Qualification Descriptors (QDs) with Mission Statements (MS)

	MS-1	MS-2	MS-3	MS-4
QD-1	3	3	3	3
QD-2	3	3	2	2
QD-3	3	3	3	3
QD-4	3	3	3	2
QD-5	3	2	3	2

Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping.

COURSE DESIGN

Course Code: Title of the Course: **ILMUL SAIDLA&MURAKKABAT**

L-T-P : **L-4.16 Hours/week, P-6.66 Hours/week**

(L=Lecture hours, T=Tutorial hours, P=Practical hours)

COURSE LEARNING OUTCOMES (CLOs) (5 TO 8)

After completing this Course, the students should be able to:

CLO-1: Understand fundamentals of *Unani* Pharmacy along with modern advancements of pharmaceutical industry.

CLO-2: Identify, procure, store and dispense *Unanimufrad* as well as *murakkab* drugs

CLO-3: Advise the patient about safely usage of *Kushta* and other potent drugs.

CLO-4: Prepare quality formulations (small scale) in clinical setups and hospitals.

CLO-5: Work as a pharmacist in manufacturing sections of *Unani* pharmaceutical industry

CLO-6: Dispense various *Unani* formulations to the patients as per the prescription.

Mapping of Course Learning Outcomes (CLOs)with Program Learning Outcomes (PLOs) and Program Specific Outcomes (PSOs)

	PL O 1	PL O 2	PL O 3	PL O 4	PL O 5	PL O 6	PL O 7	PL O 8	PL O 9	PL O 10	PL O 11	PL O 12	PS O 1	PS O 2	PS O 3	PS O 4
CL O1	3	2	3	2	2	1	1	3	3	1	1	2				
CL O2	3	2	3	2	2	2	2	3	3	1	1	2				
CL O3	3	2	3	2	3	2	3	2	1	2	1	2				
CL O4	3	3	2	3	3	1	2	2	1	2	1	3				
CL O5	3	3	2	3	3	2	2	3	2	2	3	3				

CL	3	2	2	3	3	3	3	3	2	2	3	2				
O6																

Each Course Learning Outcome (CLOs) may be mapped with one or more Program Learning Outcomes (PLOs). Write '3' in the box for 'High-level' mapping, 2 for 'Medium-level' mapping, 1 for 'Low-level' mapping. Map with PSOs wherever applicable.

Detailed Syllabus:

Unit 1:

Mabadiyate Tib (Fundamentals of Unani Medicine)

20 Hours

- Tib ki Tareef aur manviat
- Tib ki Mukhtasar tareekh
- Mukhtalif Tibbi Mazamin Ka ijmalī khaka
- Arkan ka Ijmalī Taruf
- Mijaz ki Tareef Aqsam aur Ahmiyat
- Akhlat Ki Tareef Aqsam aur Ahmiyat
- Aza, Arwah, Quwa aur Af'al ka Ijmalī taruf

Introductory inputs of Basic Anatomy and Physiology:

20 Hours

- Terminologies related to human anatomy and physiology.
- Cells and tissues
- Composition and functions of Blood and Lymph
- Osseous system: structure and functions of bones and joints
- Digestive system
- Heart and its circulation
- Structure of respiratory organs and functions
- Urinary system

- Nervous system and sense organs
- Menstruation, Ovulation and Spermatogenesis

Asbabe sitta zarooria (Six essential factors): Tareef aur Ahmiat 05
Hours

Unani Usoole Ilaj: Ijmali Taaruf

(Introduction to the principles of Unani treatment) 05 Hours

Modes of treatment

- Ilaj Bil Ghiza (Dietotherapy)
- Ilaj Bil Dava (Drug Therapy)
- Ilaj Bil tadabeer (Regimenal Therapy)
- Ilaj Bil Yad (Surgery)
- Ilaj Bil zid, Ilaj Bil misl, Qanoone Kaifiyat, Qanoone Kamyat, Qamoone Waqt, Ashiya-e-Mulaema
- Tanqiya-e- Badan and its sources

Practical: Demonstration of the material related to the topics mentioned in theory portion

Unit 2:

Kulliyat Advia wa Advia Mufradah

(Principles & Characteristics of Unani Single Drugs)

Theory: 15 Hours

Kulliyate Advia:

- Dawa and Ghiza
- Advia ki mizaji Taqseem aur ahmiyat
- Istelahat Af' al-e- Advia
- Masalike Advia
- Muzir and Musleh
- Abdale Advia

Advia Mufradah:

35 Hours

- Darj zel advia ki mahiayat, Shanakht, Mizaj, Af'al, Istemalat aur Mizdare Khurak wa Muzarrat ki tafseel.(Detailed description of Morphology, Identification, Mizaj, Actions, Uses Dosage and harmful effects of the following drugs):

Abhal, Abresham, Adusa, Afsanteen, Aftimoon, Afyun, Amla, Amber, Anisoon, Anjabar, Anjeer, Asaroon, Asgand, Aslussoos, Aspaghool, Aspand, Asrol, Aqarqarha, Atees, Azaraqi, Babchi, Baboona, Badam, Badranjboya, Baidanjeer, Bailgiri, Baladur, Balela, Banafsha, Baranjasif, Barhamdandi, Bartang, Bazrulbanj, Beesh, Behman, Behroza, Bisbasa, Bisfaj, Biskhapra, Bura Armani, Buzidan, Chiraita, Chobchini, Dammulakhwain, Darchini, Darunaj], Elva, Filfil daraz, Filfil siyah, Gandana, Gile Armani. Gile Multani, Gilo, Habbul Aas, Habbussalateen, Haldi, Halyun, Hanzal, Heel Kalan, Heel Khurd, Hajral Yahood, Hilteet, Irsa, Izkhar, Jadwar, Jaiphal, Jauzmasal, Kabab Khandan, Kafoor, Kibreet, Gule Surkh, " Muqil, Gaozaban, Kababchini, Kafedarya, Kameela, Kasoos, Kehroba, Khaksi, Khayarshambar, Khulanjaan, Kundur, Loban, Lodh, Luffah, Luk, Malkangant, Mastagl, iMundi, Muqil, Mur, Murdarsang, Neem, Pambadana, Parsiyawashan, Plas, Podina, Qaranfal, Qarnul Ayil, Salab Misri, Samagh Arbi, Sandal Safaid, Sandal Surkh, Sazij Hindi. Suranjan, Sumbulutteb, Sammulfar, Satawar, Tamarhindi, Tewaj, Tinkaar, Toot, Tudri, Turanj, Turbud, Unnab, Ustukhuddus, Waj, Zafran, Zanjabeel, Zeera Safaid, Zeera Siyah

Practical: Common methods of identification of Unani Drugs, Demonstration of the drugs, i mentioned in theory portion, in herbal garden and drug museum for the purpose of their identification. Preparation of Herbarium

Unit 3:

50 Hours

Ilmul Saidla (Unani Pharmaceutics)-I

- Dawasazi: Tareef, Aqam wa Zaroorat
- Dawasazi la Tareekhi pasmanzar
- Faraiz-e-Dawasaz
- Amaliyate dawasazi

- Irgha, Tarveeq, Iqla, Tashvia, Tabkheer, Tadmkeen, Tajfeef, Gasl, Tasfia, Tasveel, Ihraq, Taklees, Tahmees, Tabalvur
- Istilahat-e-Dawasazi
- Buddah, Kharashida, Magharbal, Kafgriftah, Muqarraz, Muqashshar, Mushawwa, Salaya, Put, Charkh, Matbookh, Manqoo, Sayeeda, Chahar tukhm, Chahar Magz, Kajli etc
- Tasfia
- Shahad, Kharateen, Simab, Kibrit, Shingaraf, Sibr, Bahroza, Mom, Abrak
- Tadabeer wa Islah-e-Advia
- Afyun, Kamoon, Azaraqi, Shangraf, Habbus-salateen, Turbud, Ghariqoon, Saqmunia, kibrit, Sammulfar, Hartaal.
- Arq kasheed karne ke Mukhtalif Tarique
- Amal-e-Tasyeed: Kafoor, Loban, Shora Qalmi
- Iqla: Chirchita, Jau, Turb, Khapazah
- Usara, Rub aur Sat banane ki tarkeeb (Methods of preparation of Extract, Rub and Sat).
- Roghan nikalne ki tarkeeb (Methods of Oil Extraction).
- Sufoof Sazi . Usool, Tareeqe, aur darjate Sufoof (Preparation of powder: principles, i methods and the grades of powder)
- Qiwam tayyar karne ke tareeqe aur qiwami madde (Methods of preparation of Qiwam and materials used for it).
- Aalat-e-Dawasazi (Instruments used in Unani Pharmacy)
- Kharal, Aalae tareveeque, Aalae Tajfeef, Aalae Taklees, Patal Jantar, Jaljantar, Chhalniya, Granulator, Tablet making machine, Coating machine, grinders, Distillation apparatus, Desiccator, Ovens, Crucibles.
- Aamare Advia (Shelf life of Unani drugs)
- Good Manufacturing Practices (GMP)
- Drugs and Cosmetics Acts

Practical: Practical training and demonstration of the above processes

Unit 4:

Ilmul Taklees (Calcinology)

25 Hours

- Taklees: Tareef, Aghraz wa Maqasid, Zarurat wa ahmiyat (Definition, aims and objectives and scope)
- Taklees ka Tareekhi Pase Manzar (Historical background)
- Aalat barai Kushtasazi (instruments used in the preparation of Kushta)
- Kusta saz se mutalliq umoomi Usool wa Hidayat (Principles and precautions regarding calcination):
- Tareeqai Taklees(Methods of Preparation of Calx): Faulad, Hartal, Shangraf, Sadaf, i Marjan, Qalayee, Gaudanti, Sammul far, Nuqra, Baizae Murgh, Musallas.
- Kushton ki shanakht (Identification of calx)
- Kushton ke Afal wa Tibbi Afadiyat(Pharmacological action & Therapeutic use of calx)
- Kushton ke muzir asrat (Adverse effects of calx)
- Kushton ke Istemal me Umumi Hidayat (precaution in use of calx)

Juzwi Dawasazi (Dispensing Pharmacy)

25 Hours

- Individualization of therapy and Juzvi Dawasazi
- Hospital Pharmacy: Important Features, Scope and necessity
- Drug Distribution system
- Sterilization of instruments, containers and utensils used in the preparation of drug
- Aseptic measures in drug delivery system
- Pharmaceutical procedures of hospital pharmacy
- Usool-e-Nuskha Naveesi
- Nuskha Bandi ke tareeqe aur motalleqa istelahaat

- Adverse Drug Reaction: Basic concept of methods of its reporting
- Storage Management. Collection, drying, storage, dispensing etc
- Drug preservation and packaging
- Preparation of special diet for indoor patients: Maul Asl, Maul Buzoor Maul Shayeer, Maul I Jubn, Maul Laham

Practical - Practical training and demonstration of the above processes

Unit 5:

50 Hours

Advia Murakkabah (Unani Compound Formulations):

Theory

- Ashkale Advia ka Ijmali Taaruf (Introduction of different dosage forms)
- Tarkeebe Advia (Compounding of drugs and its significance)
- Murakkab dawaon ke Miza) ka taayyun aur ahmiyat (Determination of temperament of compound drugs and its importance)
- Qarabadeen - Tareef, ahmuat aur mashhoor qarabadeen ka taaruf (qarabadeen- Definition, importance and introduction of famous qarabadeen)
- Darjazail Murakabat ke aizae tarkeebi, tarkeeb tayyar, afa'l, miqdare khurak, tareeqae i istemal aur ihteyati tadabeer (Ingredients, methods of preparation , actions, uses, dosage i and precautons of the following compounds)
 - Arq Kasni, Arq Mako, Arq Badyan, Arq Ajwain
 - Majoon—Majoon Falasfa, Majoon Dabidul Ward, Majoon Aarad khurma
 - Jawarish -Jawarish Kamooni, Jawarish Amla, Jawarish Jalinoos
 - Itrifal -Itrifal Kishnizi, itrifal Ustukhuddoos
 - Khamira - Khamira Gaozaban Sada, Khamira Abresham, Khamira Marwareed
 - Murabba-Murabba Amla, Murrabba Behi, Murrabba Halela
 - Hab-Habbe kabid Naushadari, Habbe Tinkar, Habbe Hilteet

- Marham—Marham Dakhilyoon, Marham Zangar, Marham Raal
- Laooq- Laooq Sapistan, Laooq katan, Laooq Khaskhaash
- Safoof-Safoof Muqliyasa, Safoof Mullayain, Safoof Chutki,
- Qurs — Qurs tabashree, Qurs Sartan Kafoori, Qurs Podina
- Sharbat — Sharbat Unnab, Sharbat Humma, Sharbat Faulad
- Gulqand
- Sikanjabeen-Sikanjabeen nanayee, Sikanjabeen unsuli, Sikanjabeen Leemoni
- Qairooti
- Advia Muzayyana (Cosmetic Formulations) Ubtan ,Ghaza, Ghaliya, Khizab

Practical: Preparation of at least one formulation from each of the above dosage forms.

(Number of Units may be decided by the School/Department/Centre)

Reference Books:

1. Kabiruddin M. *Bayaze Kabeer*. Part-II. Hyderabad: Hikmat Book Depot, Deccan;(YNM)
2. Kabiruddin M. *Ilmul Saidla*. Eijaz Publication, Delhi
3. Rehman Z. *Jadeed Unani Dawasazi*. Idara Kitabus Shifa. Delhi; 2014.
4. Anonymous. *Qarabadeen Majeedi*. All India Unani Tibbia Conference, Delhi; 1986
5. Anonymous. *National Formulary of Unani Medicine*. Part-I, New Delhi: CCRUM, Ministry of H & F.W. Govt. of India
6. Jilani G, Mukhzanul Murakkabat. New Delhi:Aijaz publishing house, 1995
7. Rehman, S.Z., (1991). Kitabul Murakkabat, Publications division, Muslim University, Aligarh.

Teaching-Learning Strategies in brief (4 to 5 sentences)

- Along with the classical chalk-talk method of teaching, we also use digital audio-visual teaching-learning methods.
- Videos of different pharmaceutical processes has been shown to the students for easy understanding of complicated procedures.

- Teaching in laboratory is also done to demonstrate various pharmaceutical procedures in situ.
- Visit to the leading Unani pharmaceutical industries.

Assessment methods and weightages in brief (4 to 5 sentences)

- The assessment is based on the internal assessment and the annual examination.
- There are two compulsory internal assessment tests (including theory & Viva-voce) having 25% weightage.
- Annual (including theory & practical and Viva-voce) examination will be held at the end of the academic year having the weightage of 75%.