

## Syllabus

for Courses affiliated to the  
Kerala University of Health Sciences

Thrissur 680596



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

**Course Code 021**

**(2016-17 Academic year onwards)**

**2016**

### 3.1- COMMUNICATION SKILLS

Theory- One paper (100 Marks)

Total Teaching Hours: 100 hours

#### 1. Interpersonal communication skills:

Direct, face-to-face communication that occurs between two persons. Dialogue oral conversations between two or more people.

#### 2. Focused Interactions:

This primarily results from an actual encounter between two persons. This implies that the two persons involved are completely aware of the communication happening between them.

#### 3. Unfocused interactions:

This occurs when one simply observes or listens to persons with whom one is not conversing. This usually occurs at stations and bus stops, as well as on the street or at restaurants etc.

#### 4. Nonverbal communication skills:

Aspects of body language, gestures, facial expressions, eye contact etc. Recognizing emotions and being sensitive to other's feelings and emotions Written and typed modes of communications.

#### 5. Computer aided communication:

- a. Computer-aided instruction (CAI).
- b. Use of computers to develop communication skills.
- c. Computer modeling and computer tutors.
- d. Operating Systems.
- e. Internet Surfing and Searching Skills.

#### 6. Report writing and presentation:

- a. Effective writing.
- b. Delivering and effective presentation.
- c. Seminar-lectures/group discussions, sharing of ideas, role-play exercises.

#### 7. Acquisition of Medical Information:

Text-book, Reference Book, Research Papers, Review Papers, Drug Indexes, Electronic Media: Types, Reliability

### 3.2- ILMUL SAIDLA (UNANI PHARMACEUTICS)

Theory- Two Papers-200 Marks ((100 Marks each)  
Total Teaching Hours-140 hours

#### PAPER I

(100Marks)

#### THEORY

1. **Saidla ki tareef**, darjabandi, ahmiyat aur tareekhi pas-e-manzar (Definition of Pharmacy, its classification, short history and chronological development of pharmacy).
2. **Hindustani Qarabadin ke Khusoosi hawale se Unani tibbi**, Qaumi Qarabadin ka ta'aruf (Introduction to Unani Pharmacopoeias), National Formulary with special reference to the Indian Pharmacopoeia).
3. **Awzan-e-Advia**: jadeed wa qadeem awzan wa paimane (Introduction of ancient and contemporary system of measurement).
4. **Mufrad wa murakkab dawao** ke husool, Zakheera andozi, tahaffuz aur tanzeem ke usool wa qwaneen, neez amal-e-tajfeef, iske aqsam, Aalat-e-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 ijmal 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, Ksheshanda aur zulal.
6. **Safoof (Powder)**:
  - a. Mukhtalif chhalniyo ke tawassut se **safoof ki darjabandi** (Size Reduction Standards of sieves, powder gradation).
  - b. **Tahbib (Granules)**: Tareeqa e tahbib (Methods of granulation).
  - c. Darjazail Advia ki **safoofsazi** (Powdering of the following drugs): Aarad Kurma, Ushuq, Muqil, Afiyoon, Rasaut, Mastagi, Abresham, Magziat, Zafran, Hajariyat, Sadaf, Marwareed, SangeJarahat.
7. Ba'az dawao ki **tareeka tayyari k makhsos aamal**: (Preparatory Methods of certain drugs):

- a. **Amle tarweeq** (specific separation technique): Barge mako sabz, Barge kasnisabz.
- b. **Amle Tasfia** (Clarification/purification): Salajeet, Shahad, Kharateen.
- c. **Amle Tasyeed** (Sublimation): Sammuflar, Gandhak, Kafoor.
- d. **Amle Iqla** (Preparation of Lixiviation/salt): Chirchita, Mooli, Jau.

**8. Unani dawaon ki tarkeeb tayyari mein GMP ka Ta'rruf wa intebaq** (Brief description of Good Manufacturing Practices (GMP) in the manufacturing of Unani Drugs).

**9. Drugwa Cosmetic Act** kataarruf (Introduction to Drugs & cosmetics Act).

**10. Aqras wa Huboob** (Tablets & Pills making process): Ta'reef, mukhtalif aksam wa khusiyat, tareeka tayyari k aamal makhsoosa, 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).

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

**12. Tatheer** aur iski aqsam (Sterilization-Concept, types & Significance in relation to Unani Drugs).

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

**14. Darjazail ashkhase Advia ki aqsam, tarteebe ajza wa tarkeeb tayyari** (Types, formulation, manufacturing procedures of):

- a. Marham
- b. Creams
- c. Pastes
- d. gels

**15. Advia ki baham aamezish wa yaksaniyat** – safoof, sayyal, neem jamid dawai ajza ki bahamaamezish (Mixing and Homogenisation of Liquid, powder sands emulsifying ingredients).

**16. Tasfia aur iske mukhtalif zara'e** (Filtration- Theory of filtration, different filtermedia).

**17. Ba'az makhsoos Advia ke asli or mayyari hone ki shanakht aur inki khususiyat ke jaanchne ke tareeqe.** (Methods for identification, determination of quality and purity of certain drugs): mushk, amber, zafran, Shahad, roghan badam, Roghan Zaitoon, Roghan Kalonji, marwareed.

18.

- a. Mukhtalif murakkabat me istemal hone wale **qiwam ki tarkeeb-e-tayyari, rivayati aur jadeed tariqon se iska tajzia** (Preparation of qiwam for compound drugs and its assessment with the help of refractometer, Sacchrometer).
- b. Murakkabat me mushtamil muwajiza ajza'e shakriya, launiya wa atria (Permissible sweetening, colouring & Flavouring agents).
- c. Darajazail qiwami 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 tareeqe aur tayyari (Different methods of preparation of oils and tila).

20. **Darjazail Advia ki tadbeer wa islah-e-Advia ke mukhtalif tareeqe** (Methods of tadbeer (Detoxification Process/Corrective measures of the following drugs): Ajwain, Zeera, Afyoon, Anzaroot, Aelwa, Bahroza, Bhang, Biladur, Habbus Salateen, Azaraqi, Post baiza-e-murgh, Turbud, Chaksu, Haleela, Gariquoon, Saqmoonia, Khubsul Hadeed, Gandhak, Sammul faar, Sang Basri, Surma.

21. **Aml'e Ihraq wa Taklees** ke rivayati wa jadeed tareeqe (Methods of incineration, with conventional and modern method):

- Filizzat, Hajariyat, Zavilarwah.
- Boota, Gile hikmat, Kaproti, (Use of 'Put' and its types).
- Darjazail Kushto'n ke hawale se Kham Kushto'n ki shanakht (Identification of Kushta Kham 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-SammulFaar.
- 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 baizae murgh, Kusht-e-Sadaf, Kusht-e-Marjan, Kusht-e-Abrak, Kusht-e- Faulad, Kusht-e-Qalayee, Kusht-e-Hajrul yahood, Kusht-e-Khaptul Hadeed, Kusht-e-Musalas.

22. Darjazail **Advia ki Nauyat Tarkeeb** (Composition of the following drugs): Dare chikna, Safeda Kashghari, Raskapoor, Kajli.

23. Ba'az makhsoos **Aghzia wa Masnua'at aarash ki tarkeeb tayyari** (Brief Introduction and preparation method of Nutraceuticals and Cosmeceuticals) : Maul jubn, Maul asl, Maul laham, Maul buzoor, Maul boquool, Maul fawakeh, Maul Shayeer, Ghaziyah, Ghaliyah, Kajal, Ubtan.

**24. Aml'e Takhmeer** ka ta'aruf (Introduction to Fermentation): Preparation of Sirka, Nabeez, Darbohraetc.

**25. Aalati dawasazi** ka ta'ruf or tareeqa-e-istemal (Brief description of Pharmaceutical equipments and their application).

**(ADVIA MURAKKABAH)**

**PAPER II**

**(100Marks)**

**THEORY**

**I. Tarkeebe Advia ke aghraz wa maqasid** (Aims and objectives of compounding of the drugs).

**II. Tibbi Unani ki mayari aur qaomi qarabadeen me mazkooor darjazail ashkal-e-Advia ka ijmalii Bayan** (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.

**III. Darjazail murakkabat ke ajza'e makhsoosa, afa'l wa khawas, mahl-e-istemal aur tarkeeb-e-tayyari** (Main constituents, Therapeutic uses, actions, dosage and preparation of following compound formulations):

- 1. Arqiyaa:** Arqe Musaffi, Arqe Baranjasif, Arqe Gaozaban, Arqe Badiyaan, MaulLaham, Arqe Mako, ArqeKasni.
- 2. Sikanjabeen:** Sikanjabeene sada, Sikanjabeene Bazoori, Sikanjabeene Na'nayi, SikanjabeeneLemooni.
- 3. Sharbat:** Sharbate Faulad, Sharbate Eijaz, Sharbate Aalu Balu, SharbateAnjbaar, Sharbate Bazoori, Sharbate Deenar, SharbateVard.
- 4. Laooq:** Laooqe Sapistan, Laooqe Katan, Laooqe Khayar Shambar, Laooqe Khash'khash, Laooqe Nazli, LaooqeBadam.
- 5. 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, KhameeraSandal.
- 6. Majoon:** Majoon Aarade Khurma, Majoon Falasfa, Majoon Fanjnoosh, Majoon baladur, Majoon dabid ul wurd, Majoon Azaraqi, Majoon superipaak, Majoon sarkhas, Majoon Salab, MajoonNajah.
- 7. Jawarish:** Jawarish Jalinoos, Jawarish Kamooni, Jawarish Mastagi, Jawarish

Podina, Jawarish Bisbasa, Jawarish Shahi, Jawarish Anarain, Jawarish Amla, Jawarish Tabasheer.

**8. Itrifal:** Itrifal Ustukhudoos, Itrifal Kishnizi, Itrifal Muqil, Itrifal Zamani, Itrifal Deedan, ItrifalMulaiyin.

**9. Luboob:** Luboob Sagheer, LuboobKabeer.

**10. Tiryaaq:** Tiryaaqe Arba, Tiryaaqe Pechish, Tiryaaqe Meda, TiryaaqeNazla.

**11. Mufarrehaat:** Mufarreh Sheikhur Rayees, Mufarreh Barid, Mufarreh Yaqoot-e-Moatadil.

**12. Sofoof:** Sofoof Moallif, Sofoof Chutki, Sofoof Mulaiyin, Sofoof Muqliyasa, Sofoof Bars, Sofoof Muhazzil, Sofoof Namak Sulaimani, Sofoof-e-Teen.

**13. Sanoon:** Sanoon MujalliDandan.

**14. Huboob:** Habbe Shifa, Habbe Ayarij, Ayarij Faiqra, Habbe Kabid Naushadri, Habbe Jadwar, Habbe Papita, Habbe Asgand, Habbe Tinkaar, Habbe Muqil, Banadiqul Buzoor, Habbe Suranjan, Habbe Rasaut, Habbe Raal, Habbe Hilteet, Habbe Azaraqi, Habbe Mumsik, HabbeSimaq.

**15. Barshasha.**

**16. Dayaqqooza,** Dawaul Kurkum, DawaulMisk.

**17. Zaroor Kath.**

**18. Rubb:** Rubbe Anaar, Rubbe Seb, Rubbussoos.

**19. Roghan:** Roghan Amla, Roghan Badam, Roghan Baizae Murgh, Roghan Bede-Injeer, Roghan Qust, Roghan Malkangani, Roghan Kaddu, Roghan Samaat Kusha, Roghan HaftBarg.

**20. Qurs:** Qurs Tabasheer, Qurs Kafoori, Qurs Mosallas, Qurs Mulayyin, Qurs Dawaul Shifa, Qurs Maltibasant.

**21. Shiyaf:** ShiyafeAbyaz.

**22. Qairooti:** Qairooti AaradeKrisna.

**23. Kohl:** Kohl-ul-Jawahar.

**24. Marham:** Marham Zangaar, Marham Dakhiliyoon, Marham Kafoori, MarhamRaal.

**25. Zimad:** Zimad Jalinoos, ZimadMuhallil.

**26. Tila:** TilaeSurkh.

### JUZE AMALI (PRACTICALS)

#### PRACTICALS

(100Marks)

Teaching Hours-100

#### I. IlmuSaidla:

Unani dawasazi se muta'aliq darjazail tareeqon ki amlī Mashq (Practical knowledge of the processes/operations related to the Unani Pharmacy as included in syllabus of pharmacy).

1. Ba'az hajaryat aur dhato'n ki Kushta Sazi (Preparartion of some Kushtajaat).



2. Amliyat tajurbagah, Aml-e-Tas'eed, Aml-e-tareeq, Aml-e-tasfia, Aml-e-tarsheeh, Aml-e-ta'seer, Aml-e-Tasfia wa tadbeer-e-advia, Tarweeq, Tasfia, haleeb wa Mazeej Laboratory methods Extraction, Sublimation, Distillation, Filtration, Percolation).
3. Aqraas wa Haboob ki tayyari ke aa'male makhsoosa (Preparation of tablets and pills)
4. Marham aur cream ki tarkeebe tayyari (Preparation of ointment and cream)
5. Roghaniyat wa tila ki tareeqa-e-tayyari (Preparation of some oils and tila):
  - Roghan-e-kalunji
  - Roghan-e-baiza-e-murg
  - Roghan-e-haft barg
6. Ba'az aghzia ki tarkeebe tayyari (Preparation of some neutraceuticals)
7. Maintenance of practical record book with suitable diagrams and record of experiment.
8. Visit to Unani dawakhana (Pharmaceutical industry) to study the manufacturing of drugs at large scale.
9. Rivayati wa jadeed aa'lat-e-dawasazi ka ta'ruf wa tareeqae istemal (Identification and uses of conventional as well as modern Pharmaceutical equipments and apparatus).

## **II. AdviaMurakkabah:**

1. Preparation of at least one compound drug from each category with proper prescribed ingredients and dosages mentioned in the Syllabus.
2. Preparation of record book.



### 3.3- TIBBE QANOONI WA ILMUL SAMOOM (Medical Jurisprudence & Toxicology)

Theory- One Paper (100 Marks)  
Total Teaching Hours: 100 hours

#### TIBBE QANOONI (Medical Jurisprudence)

#### THEORY

(50Marks)

##### 1. Introduction:

Definition of Medical Jurisprudence and Forensic Medicine. Courts & their powers and proceedings. Sentences authorized by Law. Medical evidences (medical certificates and medicolegal 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 medicolegal 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. Marg-e-Tashaddud (Violent death):

Causes & types. Suicide, homicide and accidental death. Asphyxia and its stages, Death from hanging, strangulation, suffocation, drowning, starvation and their medicolegal importance.

##### 5. Jarah wa Zakhm (Trauma and Wounds):

Definition, characters and medicolegal 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 postmortem wounds.

##### 6. Harq wa Salaq (Burns and Scald):

Definition, classification, stages & difference between ante-mortem & post-mortem wounds and their medicolegal importance.

**7. Ananat wa Uqr (Impotence and Sterility):** Definition causes and medicolegal importance.

**8. Dosheezgi (Virginity):** Definition, signs and medicolegal 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 wa Isqaat-e-Hamal (Pregnancy and Abortion):**

Medicolegal importance of pregnancy. Definition, types and signs of abortion. MTP (India) Act 2271 & 227. Qatle Janeen (foeticide), Qatle Atfal (infanticide).

**ILMUL SAMOOM (TOXICOLOGY)**

**THEORY**

**(50 Marks)**

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) aur Tibbe Qanooni Nazaryiah (medico legal aspect of the following poisons):

**A. Samoome Akkaal (Corrosive poisons):**

- 1. Haamiz (Acids):-** Hamiz-e-Kibriyati (Sulphuric acid), Hamiz-e-Milhi (hydrochloric acid), Hamiz-e-Shora (nitric acid), Hamiz-e-Khal (acetic acid), Hamiz-e-Qatran (carbolic acid), Oxalic acid & Hydrocyanic acid.
- 2. Qalviyat (Alkalis):-** Nutrun Qalvi (caustic Soda), Qalmi Qalvi (caustic Potash), Choonaa (calcium oxide).

**B. Samoom Laaziat (Irritant Poisons):**

- 1. Samoom-Ma'dani (Metallic Poisons) and their Toxic compounds:** Samm-ul-Far (arsenic), Seemaab (mercury), Sisa (lead), and Surma (antimony).
- 2. Ghair Dhatee (Non metallic):** chlorine, iodine, Nooreen (phosphorus).
- 3. Samoom-e-Nabaati (vegetable poisons):** Baladur (semicarpus anacardium), Madaar (calotropis), Habbus Salateen (croton seed), Shahme Hanzal (colocynth), Ghoonghchi (abrusprecatorius).
- 4. Samoome Haiwani (Animal poisons):** Signs & symptoms & treatment of Ladghul Hayya (snake bite poisoning), Aqrab (scorpion bite), Telni Makkhi (canthride).

**C. Samoome Asbi (Neurotic poisons):** Opium, alcohol, chloroform, kerosene oil, cocaine, thornapple, Bhang(cannabisindica),Yabroojussanam(belladonna),Azaraaqi(nuxvomica).

**D. Samoome Qalbi (cardiac poisons):-** Tobacco, Beesh (aconite).

**E. Samoome Tannaffusi (Respiratory poisons):** Carbon monoxide, carbondioxide.

**F. House hold poisons:** Tick-20, DDT powder, aluminum phosphate, and pesticide, cosmetics like hair dye, shampoo, lipstick, skin cream, eye lotion and eye shades.

### JUZE AMALI (PRACTICAL)

#### PRACTICALS

(100Marks)

Teaching Hours-50

1. Visualization of postmortem.
2. Visualization of following in the museum of Tibbe Qanooni & Ilmus Samoom.
  - a. Model, charts & instruments.
  - b. Different types of hair for identification.
  - c. Different antidotes & antiseptic.
  - d. Identification of specimens of poisons.
  - e. Demonstration through audio-visual aids.

Students will maintain the record book of all the practical and demonstrations and also prepare charts and mode.

### 3.4 SAREERiyAT WA USool-E-ILAAJ (BED SIDE CLINIC & PRINCIPLES OF MANAGEMENT)

Theory- One Paper (100 Marks)

Total Teaching Hours: 80 hours

#### THEORY:

1. **Ta'rruf, Sareeriyat ki gharaz wa ghayat** (Introduction, Aim and Objectives of bed side clinic).

2. **Roodad-e-Mareez** (History taking).

3. **Imtehan-e-Mareez Umoomi** (General examination of the patient).

4. **Istifsarāt wa imtehan-e-nizami** (Interrogation and systemic examination of the patient):

- a. Nizam-e-Hazm (Digestive System)
- b. Nizam-e-Tanaffus (Respiratory system)
- c. Nizam-e-Qalb wa Urooq (Cardiovascular System)
- d. Nizam-e-Baul wa Tanasul (Urinary & Reproductive System)
- e. Nizam-e-Izam wa Mafasil (Musculoskeletal System)
- f. Imtehan-e-Jild (Examination of Skin)
- g. Nizam-e-Asbi (Nervous System)
- h. Nafsiyaat (Psychiatry)
- i. Moayina-e-Atfaal (Examination of Children)
- j. Behosh Mareez ka Moayina (Examination of unconscious Patients)
- k. Imtehan-e-Chashm, Uzn wa Anaf (Examination of Eye, Ear and Nose)
- l. Imtehan-e-Amraz-e-Damviya (Examination of haemopoietic System)
- m. Amraz ki zahiri alamaat (External manifestation of disease)

#### 5. **Nabz(Pulse):**

Nabz ki Ta'reef, Dekhne ke tareeqe aur sharayat, Nabz par umoomi tabsira, Ajnase nabz aur unka ijmalī bayan, Nabz-e-Mufrad wa Nabz-e-Murakkab ki aqsaam ma'a Tareef, Asbab-enabz, Asbab-e-masika ke ahkam wa aasar, Mukhtalif mizajon ki nabz, Aourton, Bachhon aur Haamla Aourton ki nabz, Nabz-e-Auram, Nabz-e-Auja, Nabz ke ahkam, Awariz-e-Nafsanīa 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)

**6. Baul (Urine):**

- a. Imtehan-e- Baul ke sharayat (Conditions of urine examination).
- b. Aqam-e-Baulbaaitebar-e-(Types of urine in the respect of following points):
  1. Siqle Izafi (Specific Gravity)
  2. Laun(Color)
  3. Qiwan(Consistency)
  4. Boo(Odour)
  5. Jhag (Froth)
  6. Rasoob(Precipitation)
  7. Kadoorat(Turbidity)
  8. Miqdar(Quantity)
- c. Imtehan-e-Baul baraye Tashkhees-e-Amraz (Examination of urine in respect of diagnosis of diseases).

**7. Baraz (Stool):** Imtehan-e-Baraz baraye Tashkhees-e-Amraz (Examination of stool in respect of diagnosis of diseases).

**8. Alamaat wa Asbab su-e-mizaj sada wamaddi.****9. Usoole Ilaaj (Principles of Management).**

- a. Amraz-e-sue Mizaj sada wa maddi ka Usoole Ilaaj: Tadeel watabdeel-e-mizaj
- b. Istifragh-e-madda :Istifragh ke ahkam, usool wa sharayat, aghraaz wamaqasid

**10. Auram ka Usoolellaaj**

- a. Auram-e-Harrah
- b. Auram-e-Barida
- c. Auram-e-Hadda
- d. Auram-e-Muzminah
- e. Auram-e-Sulba
- f. Auram-e-Reehi

**11. Musakkinat (Analgesics):** Darde umoomi wa maqami aur munawwimat (general and local pains andhypnotics).

**12. Usoole Ilaaj mein Mundarja Zail Umoor keAhkam:**

Mausam ki shiddat mein qawi ilaaj, qawi Ilaaj mein eyanat, Ilaaj me Tadreej, Tabdeel-e-Aab wa Hawa, Tabdeel-e-Waza, Tashkhees na hone ki surat mein Ilaaj, Ilaaj mein kashmakash (Guidelines for the following factors in the principles of management: Potent treatment in extreme climate, assistance in potent treatment, grades in managements, change of climate, change of posture, treatment of undiagnosed diseases, dilemma in treatment).

**13. Usoole IlaajNizami:**

- Amraz-e-Qalb wa dauranekhoon
- Amraz-e-Tanaffus
- Amraz-e-Hazm, kabid, tehal wamararah
- Amraz-e-kuliyā wamasana
- Amraz-e-Baah
- Amraz-e-Reham
- Amraz-e-Aaza'e nafsaniya maslan sarsam, laqwa, falij,sudaa
- Amraz-e-ghudad-e-laqanatiya
- Amraz-e-Naqs-e-Istehala
- Bezabta tarz-e-zindagi se paida hone waale amraz (Lifestyledisorders)

**14. Basic understanding of following investigations:**

- **Radio diagnosis including CT scanning and MRI**
- **Scopy(Endoscopy, Laparoscopy, Colonoscopy, Sigmoidospyetc)**
- **ECG, ECHO, Angiography and Cardiaccatheterization**
- **Doppler**
- **FNAC andBiopsy**
- **Tapping of fluid**
- **Spirometry and PFT**

**JUZE AMALI (PRACTICALS)****PRACTICALS****(100Marks)****Teaching Hours-140 hours**

1. Khoon ka imtehan (Examination of blood)
2. Qarura ka mufassal imtehan (Complete examination of urine)
3. Baraz ka mukammal imtehan (Complete examination of stool)
4. Balgham ka imtehan (Examination of sputum)
5. Amlī mushahda ko maa zaroori khakon ke copy par utarna (Recording of experiments along with diagrams in practical record book)
6. Khiz'a (Biopsy &FNAC)
7. Rooteen ke kimyai Haivi imtehan (Routine bio-chemical tests)
8. ShifakhanemeinSareeriyatkitaleem(provision of clinical teaching in Hospital)
9. Students have to present Record book of minimum 20 cases of patients.

### 3.5 ILAJ BIT TADBEER (REGIMENTAL THERAPY)

Theory- One Paper (100 Marks)

Total Teaching Hours: 80 Hours

#### THEORY:

- Ilaaj-bit-Tadbeer ka taarruf, tareekhi pas-e-manzar, gharaz wa ghayat wa ahmiyat ka umoomi bayan. (General Introduction of Ilaaj-bit-Tadbeer)
- Asbab e sitta zarooriya ki gharaz wa ghayat wa tadbeeri ahmiyat ka bayan (Therapeutic implication of six essential factors and their regimental importance) and Tadabeer ki Taqseem (classification of various modes according to Asbab-e-sittazarooriya)
- Ilaaj-bit-Tadbeer ki mundarjazail tadabeer ke usool wa zawabit, sharayat, aghraaz wamaqasid, tareeqe istemaal wa mumaniyat ka tafseeli bayan (Detailed description of various regimental modalities along with their indications and contraindications):
  1. Taleeq (Leeching/leechTherapy)
  2. Hijamah(Cupping)
  3. Fasad(Venesection)
  4. T'areeq(Diaphoresis)
  5. Hammam(Bath/Hammam)
  6. Takmeed(Fomentation)
  7. Amale kai(Cauterization)
  8. Abzan (Sitzbath)
  9. Qai(Emesis)
  10. Shamoom (AromaTherapy)
  11. Huqna(Enema)
  12. Natool(Irrigation/Hydration)
  13. Saoot (Nasaldrop)
  14. Lakhlakha(Inhalation)
  15. Zimaad wa Tila(Paste/Liniment)
  16. Pashoya (Foot bath)
  17. Gharghara(Gargle)
  18. Mazmaza(Mouth wash)
  19. Tadheen (Oil Massage/Knead)
  20. Ilaam (CounterIrritant)
  21. Bakhoor wa Inkebab (Vaporization/Steaminhalation)
- Istifragh, Munzij wa Mus'hil ke usool wa zawabit, sharayat, aghraaz wa maqasid katafseeliBayan (Details description of Istifragh, Munzij o Mus'hilTherapy).
- **Dalak** ki Tareef, gharaz wa ghayat, ahkam, aqsaam, zaroorat, fawayed, moalejati ahmiyat,dalak me Roghaniyat ka istemaal, dalak ke jadeed tareeqe wa jadeed maloomat(Definition, Aims & Objectives, Recommendations, Types, Therapeutic ApplicationIndications, Oil massage and Recent developments in MassageTherapy).



- **Riyazatki** Tareef, gharaz wa ghayat, ahkam, aqsaam, zaroorat, fawayed, moalejatiahmiyataurJadeed tareeqe wa asri maloomat (Definition, Aims, Objectives, Recommendations, Types, Therapeutic Indications and Recent Advances in Exercise Therapy).
- **Moaleja-e-fizyai** me mustamal mundarjazail fanni tareeqekaar ki tafseeli maloomat(Details of the following technical Procedures ofPhysio-therapy):
  1. Takmeed bil mauj taveela (Long WaveDiathermy)
  2. Takmeed bil mauj sagheerah (Short WaveDiathermy)
  3. Takmeed bil Ultra Sound (Ultra SoundTherapy)
  4. Takmeed bil Shiga tahtul Ahmar (InfraredTherapy)
  5. Riyazat treadmill (TreadmillExercise)
  6. Riyazat katafi da'eri (Shoulder WheelExercise)
  7. Tahdeed(Traction)
  8. Riyazat mufasil-e-ka'ab (AnkleExercise)
  9. Harkate rakbi ghair mufa'eli tasulsuli (Knee Continuous Passivemovements)
- **Ghiza:** Tareef , aqsaam,(ghiza-e-latif, ghiza-e-kaseef, ghiza-e-raddi-ul-kaimus, ghiza-ejaiyyad-ul-kaimus, ghiza-e-khaam wa ghiza-e-matbookh, mutawazin ghiza, ghiza keHarare, umar, jins wa mausam k lihaz se ghiza ka ta'ayyun, Naqs-e-taghzia aur iss sepaida hone wale Amraz aur inka tadaruk (Diet its types, Balance diet, Diet calories andtheir method of calculation, Diet in different Age, Sex, & Climates, Malnutrition and itsremedy):
  1. Makhsoos ghizai tanzeem bahalat sehat wa maraz (Special Dietary Management of certain healthy/Diseased conditions)
  2. Dau'ran-e-hamal wa reza'at (Pregnancy & Lactation)
  3. Munafe-ul-a'zai(Physiological)
  4. Ghiza-e-Atfaal wa Naujawan wa Shayukh (Dietary recommendation for children, Adult & Oldage)
  5. Marazi (Diseased): Saman-e-Muftrat (Obesity), Zaibetus Sukri (Diabetes Mellitus),Diq (Tuberculosis), Qalbi Amraz (Cardiovascular diseases), Amraz-e-Zof-e-Mana'at (Immuno-deficiency diseases), Sartani Amraz (Malignancies), qillat-e-hayateen wa maadniyat (deficiencies of Vitamins & Minerals), Kulwi Amraz (Renal diseases), Zaght-ud-dum Qawi (Hypertension), kabdi Safravi Amraz (Hepato-biliary diseases), Fart-e-Shahmiyat-ud-dam(Hyperlipidemia).
- Mundarjazail **Makhsoos halaat mein Tadbeeri Ilaaj** ka khusoosi kirdar (Applicationof Regimental therapy in specific conditions):
  1. **Taskeen e waja'** (Pain Management)
  2. **Waja-ul-Mafasil** (Arthritis, Osteoarthritis, Rheumatoidarthritis)
  3. **Qast-ul-feqaar-ul-unqi** (Cervicalspondylosis)
  4. **Alam-ul-Qatan**(Lumbago)
  5. **Shalal-ul-Wajhi** (Bell'sPalsy)
  6. **Falij/Shalal**(Paralysis)

7. **Shaqiqa**(Migraine)
8. **Sehar**(Insomnia)
9. **Zaght-ud-dum Qawi**(Hypertension)
10. **Aureda-e-Do'ali** (VaricoseVeins)
11. **Da'aul sadaf**(Psoriasis)
12. **Irq-un-Nasa**(Sciatica)
13. Muscle Sprain, Tenosynovities, Post Stroke Complications, Fibromyalgia and, Obesity, Chronic Fatigue Syndrome, Frozen Shoulder, Chronic Ulcers, Diabetesmellitus.

### **JUZE AMALI (PRACTICALS)**

#### **PRACTICALS**

**(100Marks)**

**Teaching Hours-140**

**Amli Ilaaj Bit Tadbeer hospital ke OPD wa IPD aur shoba-e-Ilaaj Bit Tadbeer ki lab me hogi, khusosi tor par (Practical training of Regimental therapy shall be performed in the OPD and IPD of the hospital):**

1. Fasad(Venesection)
2. Hijamah(Cupping)
3. Taleeq (Leeching/leechTherapy)
4. Takmeed(Fomentation)
5. Hammam(Bath/Hammam)
6. T'areeq(Diaphoresis)
7. Abzan (Sitzbath)
8. Amle Kai(Cauterization)
9. Natool(Irrigation/Hydration)
10. Huqna(Enema)
11. Zimaad wa Tila(Paste/Liniment)
12. Pashoya (Footbath)
13. Bakhoor wa Inkebab (Vaporization/Steam inhalation)
14. Istehrar- bil-mauj qaseera (Short Wave Diathermy)
15. Istehrar- bil-mauj taveela (Long Wave Diathermy)
16. Ilaaj-bil-Fauq-us-Samai (Ultra Sound Therapy)
17. Jarr(Traction)

Tamam Atibba ko practical work-book tayyar kar ke shoba me jama karni hogi (Duly completed Practical work book must be submitted to the department).

### 3.6 AMRAZE ATFAL (PAEDIATRICS)

**Theory- One Paper- (100 Marks)**

**Total Teaching Hours: 80 Hours**

#### **AMRAZ-E-ATFAL (PAEDIATRICS):**

The course includes systematic instructions in growth and development, nutritional needs of a child, immunization schedules and management of common diseases of infancy and childhood, scope of Social paediatrics.

#### **OBJECTIVES:**

The broad goals of the teaching of undergraduate students in paediatrics are to acquire knowledge and appropriate skills for optimal dealing with major health problems of children and to ensure their optimal growth and development.

#### **KNOWLEDGE:**

At the end of the course, the student shall be able to:

- a. Describe the normal growth and development during foetal life, neonatal period, childhood and adolescence and outline deviations thereof.
- b. Describe the common paediatrics disorders and emergencies in terms of epidemiology, aetio-pathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation;
- c. State age related requirements of calories, nutrients, fluids, drugs etc. In health and disease.
- d. Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse.
- e. Outline national programs relating to child health including immunization programs.

#### **SKILLS:**

At the end of the course, the student shall be able to:

- a. Take a detailed paediatrics history; conduct an appropriate physical examination of Children including neonates, make clinical diagnosis, conduct common bedside Investigative procedures interpret common laboratory investigation and plan and institute Therapy.
- b. Take anthropometric measurements, resuscitate newborn infants with bag and mask at birth, prepare oral rehydration solution, start intravenous line and administer vaccines available under current national programs.

**THEORY****(100Marks)****CHAPTER 1:**

Importance of Paediatrics &amp; Paediatric Care in developing countries – INDIA

1. Why Paediatriccare?
2. What is Paediatriccare?
3. How to deliver Paediatriccare?
4. Responsibility of medicalpersonnel.

**CHAPTER 2:**

History taking and physical examination in paediatrics. Diagnosis &amp; Management in Paediatrics including recent diagnostic procedures.

**CHAPTER 3:****New born care:** Neonatal resuscitation, equipment required, drugs and steps for resuscitation. Examination of a New born.**CHAPTER 4:**

Growth, development, nutrition and nutritional disorders:

1. Nuqs-e-Hayateen (VitaminDeficiency)
2. Lahmi Tawanai Nuqs-e-Taghzia (Protein EnergyMalnutrition)
3. Kusah (Rickets)

**CHAPTER 5:**

1. Immunization, Immunity in Newborn &Children
2. Principles and Practice ofImmunization
3. Immunization Schedules (manayatikhaka)

**CHAPTER 6:**

Amraz-e-mutaddi (infectious diseases):

1. Judri (smallpox)
2. Humaiqa (chickenpox)
3. Hasba, khasra(measles)
4. Humma-e-danj (danguefever)
5. Humma-e-qarmizia (scarletfever)
6. Humma-e-ijamiya (malarialfever)
7. Humma-e-mevi (entericfever)
8. Falij-e-Atfaal(Poliomyelitis)
9. Zukaam (Commoncold)
10. Marz-e-Diq(Tuberculosis)

11. Khunaaq(Diphtheria)
12. Kuzaaz(Tetanus)
13. Kala-azar
14. HIV(AIDS)

**CHAPTER 7:**

Congenital diseases and genetic disorders (Amraz-e-Khalqi wa werasi): DMD, Haemophilia, Thalassaemia, 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, micro-nutrient and fluid therapy).

**CHAPTER 10:**

Puberty and related problems.

**CHAPTER 11:**

Adolescent and related diseases.

**CHAPTER 12:**

**Amraz-e-Dimagh wa A'asab (diseases of brain and nerves)**

1. Istisqa-e-Dimagh(hydrocephalus)
2. Warm-e-Aghshiya-e-Dimagh(meningitis)
3. Umm-us-sibyaan(epilepsy)
4. Tashannuj-e-Atfaal(convulsion)
5. Shalal-ul-Wajhi (bell'spalsy)
6. Guillain-Barresyndrome
7. FebrileSeizures
8. Mental retardation in children

**CHAPTER 13:**

**Amraz-e-Ain (diseases of eye)**

1. Ramad(conjunctivitis)
2. Shaera (stye or hordeolum)
3. Sulaaq(blepharitis)
4. Jarab-ul-Aj'faan(trachoma)

5. Barda(chalazion)

**CHAPTER 14:**

**Amraz-e-Gosh (diseases of ear)**

1. Iltihab-e-Uzn(otitis)
2. Sailan-e-Uzn(otorrhoea)
3. Qazaf-ul-Uzn (foreign body in the ear)

**CHAPTER 15:**

**Amraz-e-Anaf (diseases of nose)**

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

**CHAPTER 16:**

**Amraz-e-Dahan (diseases of mouth)**

1. Qulaa(stomatitis)
2. Warm-e-Lisaan(glossitis)
3. Qurooh-e-Dahan (mouth ulcers)
4. Ta' akkul dandan (dental carries)

**CHAPTER 17:**

**Amraz-e-Halaq (diseases of throat)**

1. Warm-e-louztain (tonsillitis)
2. Warm-e-Halaq (Pharyngitis)
3. Warm-e-hanjra(Laryngitis)
4. Warm-e-aslul Uzn /Warm-e-ghudda-e-nakaf (mumps and parotiditis)

**CHAPTER 18:**

**Amraz-e-Tanaffus (diseases of respiratory tract)**

1. Sual(bronchitis)
2. Shaheeqa (whooping cough)
3. Zeeq-un-nafas (bronchial asthma)
4. Zaat-ur-ria(pneumonia)
5. Zaat-ul-janab(pleurisy)

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

1. Khalqi Amraz-e-Qalb (congenital heart diseases)
2. Hudari Amraz-e-Qalb (rheumatic heart diseases) Ta'affuni Iltihab-e-ghisha-e-Qalb (infective endocarditic)

**CHAPTER 20:****Amraz-e-Maida wa Jigar (diseases of stomach and liver)**

1. Qai(vomiting)
2. Tashannuj-e-shikam (abdominalcolic)
3. Warm-e-kabid(hepatitis)
4. Yerqan(jaundice)
5. Zakhamat-ul-Kabid(Hepatomegaly)
6. Zakhamat-ul-Tehal(Splenomegaly)

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

1. Qabz(constipation)
2. Is' haal (diarrhoealdisorders)
3. Pechish, zaheer(dysentery)
4. Deedan-e-amaa (worminfestations)
5. Tadarrun-e-mevi (intestinaltuberculosis)
6. Warm-e-banqaras(pancreatitis)

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

1. Zeeq-ul-ghalfa(phimosis)
2. Qeela maieeya(hydrocele)
3. Fataq(hernia)
4. Warm-e-khusiya(orchitis)
5. Cryptorchidism

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

1. AcuteGlomerulo-nephritis
2. Warm-e-Majra-e-Baul(UTI)
3. Nephrotic Syndrome
4. Baul ferash(enuresis)

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

1. Suoo-ul-qinnia, faqr-ud-dam(anaemia)
2. Sartan-ud-dam (Leukaemia)
3. Thalassemia
4. Haemophilia
5. Sickle cell disease



**CHAPTER 25:****Amraz-e-Ghudade Ghair Qanatia (Endocrinology)**

1. Growthdisturbances
2. Obesity
3. Thyroiddisease
4. Diabetes

**CHAPTER 26:**

Miscellaneous: Drugs & drug dosage in children

**JUZE AMALI (PRACTICALS)****(100Marks)****Teaching Hours-50hours**

- 1) Amraz-e-Atfaal ki Tashkhees (diagnosis of diseases of children)
- 2) Moalejat-e-Atfaal ke mutalliq hidayaat (advices and instructions for paediatrics treatment).
- 3) Jadeed tahqiqaat ki roshini me Bachhon ki tabayi aur ghair tabayi nashonuma key nukaat (newer researches)
  - History Taking in Paediatrics-20 Case Sheets Should be Prepared.
  - Effective Communication with the Child and Care takers.
  - Evaluation of the new born.
  - Assessment of Diet and Feeding Practices.
  - Breast Feeding and Weaning
  - General Physical Examination
  - Developmental Assessment
  - National Programs on Immunization
  - Cardio-pulmonary Resuscitation
  - Resuscitation of an Asphyxiated Newborn Baby
  - Informed Consent for Practical Procedures
  - Universal Precaution and Asepsis Routines
  - Fluid Therapy
  - Oxygen Therapy
  - Naso-gastric Tube Insertion
  - Neonatal Resuscitation