

## GROUP-52 - (Dispenser Unani)

### Level- Matric+ Course of Up-Vaidya/ Unani Dispenser from University

1) General awareness, Reasoning, Mathematics, Science, History including Haryana related history, current affairs, literature, Geography, Civics, Environment, Culture etc.- (Weightage 20%)

2) Computer terminology, Fundamentals, word software, excel software, Power point, internet, web browsing, Communication, emails, downloading and uploading data on websites etc. -

(Weightage 10%)

3) Subject related syllabus-

(Weightage 70%)

---

#### Mabadiyat-e- Tib (Basic Principles of Unani Medicine) waKulliyatAdvia

##### **Mabadiyat-e- Tib:**

- a) Introduction of Unani Medicines, Definition of Tib, its aims and objectives.
- b) History of Unani Pharmacy.
- c) Introduction in of different subjects of Tib.
- d) Definition of Tabiyat and Umoor-e-Tabiyah.
- e) Definition of Arkaan, Number (Different theories and Mizaj of Arkaan).
- f) Mizaj-Definition, types and Importance MizajAsnan,Aqaalim.
- g) Akhlat-Definition, types, Khilt-e-Safra, Balgham, Dam,Sauda,Importance.
- h) An Introduction of Aza, types, Importance.
- i) Introduction of Arwah, types,Importance.
- j) Introduction of Quwa, types, Importance.
- k) Introduction of Afal, types,Importance.
- l) Introduction of Usool-e-ilaj.
- m) Brief introduction of tools for diagnosis.

##### **KulliyatAdvia:**

1. Tareef. Tareekhi pass-e-Manzer and scope of Shanakhat-e-Advia.
2. DawaGhizaZulkhassa,
3. MizajAdvia, Aqsaam (Temperament, Classification of drugs)
4. MasalikAdvia (Routes of drugs administration).
5. TaseeratAdvia (Action of drugs).
6. AshkaleAdvia (Forms of drugs)
7. QayaswaTajurba (Hypothesis and experiment for new drug development).
8. Dawaon ka HusoolwaHifazat (Collection and preparation drug)
9. Preparation and identification of fibres used in sutures and surgical dressings- cotton, silk, wool and regenerated fibre.
10. MuzirwaMuslh (Adverse drugs effect and its correction)

##### **AdviahJadeedah (Pharmacology)**

1. Introduction and scope of Pharmacology,
2. Routes of administration of drugs, their advantages and disadvantages.
3. General mechanism of drugs action and the factors which modify drug action. Various process of absorption of drugs and the factors affection them, Metabolism, distribution and excretion of drugs.
4. Pharmacological classification of drugs.
  - (i) Drugs acting on the Central Nervous System:
  - (ii) Local anaesthetics.
  - (iii) Drug acting on autonomic nervous system.
  - (iv) Drugs acting on eye
  - (v) Drugs acting on respiratory system
  - (vi) Antacids
  - (vii) Cardio Vascular drugs,
  - (viii) Drugs acting on the blood and blood forming organs.
  - (ix) Drugs affecting renal function-Diuretics and antidiuretics.
  - (x) Hormones and hormone antagonists
  - (xi) Drugs acting on digestive system
  - (xii) Chemotherapy of microbial disease

### **TahaffuziwaSamaji Tib and Pharmaceutical Jurisprudence**

#### **A. TahaffuziwaSamaji Tib (Preventive and Social Medicine)**

TahaffuziwaSamaji Tib (Preventive and Social Medicine): Definition, historical background, importance, aims and objectives

Sehat (Health):, aims & objectives and guidelines for health,ShakhsiHifzane Definition

Sehat (Personal Hygiene) and SehateAamma (Public Health) Detailed discussion of Asbaabesittazarooriya (Six essentials of life).

Marz (Disease): Definition and causes of Disease

TabaeMahaul (Physical Environment): FizaeeMahaul (Atmospheric environment),

MahauliyatiSafaai (Environmental sanitation) Components of TabaeMahaul (Physical Environment) and its related causes. Factors affecting Physical Environment

Sehat par Mausam keAsraat aur Awarizaat (Effects & complications of seasons on Health):

IndifaeFuzlaat (Disposal of Waste): Methods of Disposal of refuse Water:

Definition of normal and abnormal water, importance, qualities of safe and wholesome potable water, sources of water,

Mashroobat (Drinks): Effects of narcotics on health

GhizawaTaghzia (Food and Nutrition): Definition, importance of Diet, classification of

Diet according to the source, Dietary constituents and functions

Calories of various Diets, Daily requirements of Diet in various age groups Balanced Diet, Selection of Diet according to age, sex, and season Various methods for safety and preservation of Diet, Naqsetaghzia (Malnutrition) and Diet related diseases and their preventive measures Tasammumeghizae (Food Poisoning), Dietary importance of Milk, Amale Pasture (pasteurization), Milk borne diseases and their prevention

Hayateen (Vitamins): Definition, types, sources, daily, requirements, Diseases related to the deficient or excess intake of Vitamins.

GhizameinMadaniyat (Minerals in Diet): Names of minerals and their advantages

Diseases related to the deficient or excess intake of Minerals ShakhsiHifzaneSehat

(Personal Hygiene): Libaas (Clothing) Sources and types, selection of clothes according to season and their importance.

ZabteTauleedwaKhandaniBehboodi (Birth Control and Family Planning)

MutaadiwaWabaeeAmraaz (Infectious and Epidemic Diseases)

Asbaabewa'silawaMoidda (Causative and predisposing factors)

Causes, Sign and Symptoms, Differential Diagnosis, MuddateHizanat (Incubation Period),

AmaleTalqeeh (Vaccination):

Definition, Hospital background, methods of Vaccine preparation, types of Vaccines,

AmaleTatheer (Sterilization): Definition, importance & necessity, importance of sterilization in epidemic, latest methods, Natural, Physical & Chemical.

Dafetaffun (Disinfectant) Sources, methods of disinfection and their indications

Waba (Epidemic): Definition, Mode of Spread and their preventive measures, Taadiya

(Infection): Definition, mode of spread, routes of entry of infection,

Mana 'at (Immunity): Definition, types, methods of Immunization

San'atee Tib (Industrial Medicine): Definition, historical background, importance of various occupations, Factories and their conditions,

San'atiAaloodgi (Industrial pollution) and related diseases, San'atikhatraat (Occupational Health Hazards) and their prevention.

Pharmaceutical Jurisprudence

Definition of IlmusSamoom (Toxicology) and Samm (poison).

Classification of poisons. Route of administration of poisons. Modifying factors of the action of poisons. Diagnosis & general principals of treatment in poisoning. Anboob Medi (Stomach tube) its indications & contraindication. Indications & contraindications of Muqee (emetics) Methods of neutralizing the absorbed poison.

Triyaq (Antidotes) Modern & Unani antidotes, its type and uses methods of preservation of organs for chemical examination. Characteristic poisoning symptoms, MohalikMiqdar (fatal

dose), MuddateHalakat( fatal period), treatment, ZawahirTashreehBaadul Mouth (Postmortem appearance) & Tibbe Qanooni Nazaryiah (medico-legal aspect) of the following poisons.

A. Samoom e Akkaal (Corrosive poisons)

Haamiz (Acids): HamizKibriyati (Sulphuric acid), HamizeMalhi (Hydrochloric acid), Hamize Shora (nitric acid), Hamize Khali (Acetic acid), HamizeQatran (Carbolic acid), oxalic acid & hydrocyanic acid.

Qalviyal (Alkalis): Nutrun Kawi (Caustic Soda), QalmiQavi (Caustic Potash), Choona (Calcium oxide)

### **B. SamoomLazival (Mohiyyij) (Irritant Poisons)**

SamoomMa'dani (Metalic): Sammol Far (Arsenic) & its

compounds. Seemab (Mercury) and its compounds, Sisa (Lead oxide), antimony,

GhairDhatee (Non metallic): Chlorine, iodine, Nooreen (phosphorus)

SamoomNabaati (vegetable poisons): Biladur (Semicarpus anacardium), Madaar (Calotropis), HabbusSalateen (Croton seed), Sibr (Aloe),

Shahme Hanzal (colocynth), Ghoonghchi (Abrusprecatorius)

SamoomHaiwani (Animal poisons): Symptoms & treatment of LadahulHayya, (Snake bite), Aqrab (Scorpion bite), TelniMakkhi (Canthride).

C. SamoomAsbi (Neurotic poisons)

Cerebral (Dimagi): Opium, Alcohol, Chloroform, Kerosene oil, Cocaine, Thorn apple, Cannabis indica (Bhung), Belladonna (Yabrooj), Hyocyamusniger (AjwaineKhurasani)

D. Nukhayee (Spinal): Nuxvomica (Azaraaqi)

E. Qalbee (Cardiac Poison): Tambakoo (Tobacco), Beesh (Aconite).

Characteristic poisonous symptoms, fatal dose, fatal period, treatment, postmortem appearance and medico-legal importance of the following poisons:

Carbon monoxide, carbon dioxide, hydrogen sulphide, coal gas.

F. Description of house hold poisons, their poisonous symptoms and treatment, as Tick-20, naphtheline balls, DDT powder, almunium phosphate, pesticide, cosmetic like hair shampoo, lipstick, skin cream, eye lotion and eye shades.

## **IlmulSaidla**

### **1. Dispensing Pharmacy:**

1. Prescriptions – Reading and understanding of prescription; Arabic and Persian terms commonly used (Detailed study is not necessary), Modern methods of prescribing, adoption of metric system. Calculations involved in dispensing.

2. Incompatibilities in Prescriptions – Study of various types of incompatibilities –

physical, chemical and therapeutic.

3. Dose and Dosage of drugs, Factors influencing dose, Calculations of doses on the basis of age, sex and surface area.

## **2. Dispensed Medications:**

(A detailed study of the following dispensed medication is necessary. Methods of preparation with theoretical and practical aspects, use of appropriate containers and closures. Special labelling requirements and storage conditions should be high – lighted).

(i) Solid Dosage forms. Habb, Qurs, Kuhal, Ghazah, Ghaliyah, etc

Safoof (Powders): Types of powders, Advantages and disadvantages of powders, Safoof as different dosage forms, Granules, and Tablet. Weighing methods, possible errors in weighing, minimum weighable amounts and weighing of material below the minimum weighable amount, geometric dilution and proper usage and care of dispensing balance.

(ii) Sayyaal (Liquid): Theoretical aspects including commonly used vehicles, essential adjuvant like stabilizers, colorants and flavours, with examples. Review of the following liquids with details of formulation and practical methods. Sharbat, joshanda, Khesanda, Zulaal, Siknajabeen, Nabeez, Sirkah, Qatoor, Wajoor, Roghan, Huqnah,

(iii) Suspension: Suspensions containing diffusible solids and liquids and their preparations. Study of the adjuvants used like thickening agents, wetting agents, their necessity and quantity to be incorporated. Suspensions of precipitate forming liquids like, tinctures, their preparations and stability. Suspensions produced by chemical reaction. An introduction to flocculated, non-flocculated suspension system.

(iv) Haleeb: Types, identification of emulsion system, formulation, selection of emulsifying agents. Instabilities in emulsions. Preservation of emulsions.

(v) Semi Solid:

(a) Marham: Types, Preparation and stability of ointments by the following processes:

(i) Trituration (ii) Fusion (iii) Chemical reaction (iv) Emulsification.

(b) Zimaad (Pastes) Difference between ointments and pastes, bases of pastes.

Preparation of pastes and their preservation.

(c) Jellies: An introduction to the different types of jellies and their preparation.

(d) Tila

(e) Firzajah and Shayaf: merits and demerits, types, bases, properties, Preparation and packing, Use of suppositories for drug absorption.

(f) Majoon, Itreefal, Jawarish, khameerah, laooq, Gulqand

(vi) Dental and Cosmetic Preparations: Introduction to Dentrifices, Facial cosmetics, Deodorants, Antiperspirants, Shampoos, Hair dressing and Hair removers.

(vii) Ophthalmic Preparation: Study of essential characteristics of different ophthalmic preparations. Formulation additives, special precautions in handling and storage of ophthalmic products.

### **3. Ilm-ul-Taklees:**

Definition, aims, objectives and scope. Calcinations and Ignition.

Historical background. Standardization of kushta. Principles of calcinations and general methods of preparation of Kushtafaulad, hartal, shingraf, sadaf, marjaan, qalyee, gaudanti, qarnulayyil, sammulfaar, nuqra, tila, jast. Etc. Identification of clax. Grading of temperature. Instruments used in preparation of kushta. Use of herbs in calcinations.

General precautions to be taken during calcinations process. Adverse effects, Pharmacological action, Precaution in use, determination of shelf life etc

### **4. Miscellaneous:**

Good Manufacturing Practices (GMP), Drug standardization: basic concept, Quality control: basis Concept.

### **IlmulMurakkabat**

1. Need of compound drugs. Determination of temperament of compound drugs. - methods and its importance. Qarabadeen, Kunnash, Bayaaz-definition, methods and its importance, and introduction of famous QarabadeenKunnash and Bayaaz.

2. Introduction, ingredients, methods of preparation, action, uses, dosage and precaution of the following compounds.

Majoon: MajoonFalasfa, MajoonDabeedul Ward.

Jawaarish: JawaarishJalinoos, Jawarishkamooni

Khamira: KhamiraGoozaban, KhamiraAbresham

Murabba: Murabba Amla, Murabbabehi

Habb: Habb-e-Kabidnausahadri, HabbeTinkar, Hab e Suranjaan, Hab e Muqil

Marham: Marham Dakhliyun, Marham Zangar

Laoq: LaoqSapistan, Laoq-e-Katan

Safoof: Safoof-e-Muqliyasa, Safoof-e- Mulayyin

Qurs: Qurs-e-tabasheer, Qurs-e-Sartaankafoori

Sharbat: Sharbat-e-Unnab, Sharbat-e-Humma

Gulqand: Gulqandaftabi, Gulqandseoti,

Arq: Arq-e-kasni, Arq-e-Mako,

Sikanjjabeen: Sikanjabeen-e-Nanaayee, Sikanjaabe-e-Unsuli

Qairooti: QairootiArdBaqla

Zimaad: ZimaadMohallil, ZimadKabid

Marham: Marham-e-Rusul, Marham Zangar

Tila: Tils Surkh, TilaMuhasah

Itrifal: ItrifalKishnizi, ItrifalMuqil, ItrifalUstokhuddus.

Halwa: Halwa ghekwar, Halwa Bezemurg

Mufarrah: Mufarrahyaqqoti, mufareehShaikhurraees

Sayyal: Sayyaalfaulad, Sayyaalnuqrah, Sayyaalnaushadar

Shayaf: Shayaf Ahmar, Shayafabyaz

Sunoon: Sunoon Post mugheelaan,

Kushta: Kushtasadaf, kushtafaulad, kushtagaudanti

## **Tijarat (Commerce)**

Introduction-Trade, Industry and Commerce, Functions and subdivision of Commerce, Introduction of Elements of Economics and Management.

1. Forms of Business organisations.
2. Channels of Distribution.
3. Drug House Management – Selection of Site, Space Lay-out and legal requirements.
4. Importance and objectives of Purchasing, selection of suppliers, credit information, tenders, contracts and price determination and legal requirements thereto. Codification, handling of drug stores and other hospital supplies.
5. Inventory Control – objects and importance, modern techniques like ABC,VED analysis, the lead time, inventory carrying cost, safety stock, minimum and maximum stock levels, economic order quantity, scrap and surplus disposal.
6. Sales Promotion, Market Research, Salesmanship, qualities of a salesman, Advertising and Window Display.
7. Recruitment, training, evaluation and compensation of the pharmacist.
8. Banking and Finance Service and functions of the bank, Finance Planning and sources of finance.

## **Muhasibat (Accountancy)**

1. Introduction to the accounting concepts and conventions, Double entry Book keeping, Different kinds of accounts.

Muhasibat (Accountancy)

2. Cash Book.
3. General Leger and Trial Balance.
4. Profit and Loss Account and Balance Sheet.
5. Simple technique of analyzing financial statements.
6. Introduction to Budgeting.

## **Hospital pharmacy**

1. Hospitals Definitions, Function, Classifications based on various criteria, organisation, Management and Health delivery system in India.

2. Hospital Pharmacy:

(a) Definition

(b) Functions and objectives of Hospital Pharmaceutical services.

(c) Location, Layout, Flow chart of material and men.

(d) Personnel and facilities requirements including equipments based on individual and basic needs.

(e) Requirements and abilities required for Hospital pharmacists.

3. Drug Distribution system in Hospitals:

(a) Out – patient services

(b) In- patient services – (a) types of services (b) detailed discussion of unit Dose system, Floor ward stock system, Satellite pharmacy services, Central sterile services, Bed Side Pharmacy

4. Manufacturing:

(a) Economical considerations, estimation of demand.

(b) Sterile manufacture-large and small volume parenterals, facilities, requirements, layout production planning, man- power requirements.

(c) Non-sterile manufacture – Liquid orals, externals-bulk concentrates.

(d) Procurement of stores and testing of raw materials.

5. Nomenclature and uses of surgical instruments and Hospital Equipment and health accessories.

6. Hospital Formulary System and their organisation, functioning, composition.

7. Drug Information service and Drug Information Bulletin.

8. Surgical dressing like cotton, gauze, bandages and adhesive tapes including their pharmacopeial tests for quality. Other hospital supply e.g Ryals tubes, Catheters, Syringes etc.

9. Application of computer in maintenance of records, inventory control, medication monitoring, drug information and data storage and retrieval in hospital and retail pharmacy establishments.

## **SareeriyatiSaidla (Clinical Pharmacy)**

1. Introduction to Clinical Pharmacy Practice – Definition, scope.

2. Modern dispensing aspects – Pharmacists and Patient counselling and advice for the use of common drugs, medication history.

3. Common daily terminology used in the Practice of Medicine.

4. Disease, manifestation and pathophysiology including salient symptoms to understand the disease like Tuberculosis, Hepatitis, Rheumatoid Arthritis, Cardiovascular diseases, Epilepsy, Diabetes, Peptic Ulcer, Hypertension.

5. Physiological parameters with their significance.

6. Drug Interactions:

(a) Definition and introduction.

(b) Mechanism of Drug Interaction.

(c) Drug – drug interaction

(d) Drug – food interaction.

7. Adverse Drug Reactions.

(a) Definition and Significance.

(b) Drug – induced diseases and Teratogenicity.

8. Drugs in Clinical Toxicity – Introduction, general treatment of poisoning, systematic antidotes. Treatment of insecticide poisoning, heavy metal poison, Narcotic drugs, Barbiturate, Organophosphorus poisons.

9. Drug dependences, Drug abuse, addictive drugs and their treatment, complications.

10. Bio- availability of drugs, including factors affecting it.

**Important Note: The Weightage as mentioned against the syllabus is tentative & may vary.**