M.D. (HOM.) PART - II

HOMOEOPATHIC PHARMACY

(Speciality Subject)
1. **General Pharmacy, Pharmacology & Experiment Pharmacology in Relation to Homoeopathic Drugs**
   - Source, Identify, collection, preparation, potentization, preservation prescription, dispensing of homoeopathic drugs.
   - Definition and scope of pharmacology
   - Definition of drug, food and poison
   - Source of drugs
   - Routes of drugs administration special emphasis to oral route through, various methods for testing drugs or through hair.

2. **Pharmaco kinetic**
   - Absorption, distribution
   - Biotransformation and excretion of Drugs
   - Mechanism of drugs action and factors modifying drug actions
   - Bio availability of drugs

3. **Pharmaco dynamics**
   - ADR( Adverse Drug Reaction)
     - 1. Indications
     - 2. Contra Indications
     - 3. Side effects
   - Factors effecting dose of a drug
   - Structure activity relationship (SAR) ED50, LD50
   - Toxicology studies
   - Development of new drugs

4. **Drug proving on animal and human beings – sphere of action and affinities**

5. **Ethical committee formation for drug studies on human Beings**

6. **Systematic pharmacology: CNS, ANS Group of remedies acting on central nervous system on Autonomic Nervous System**

7. **Principles of Dispensing**
   - Posology
   - Potency and duration of action
   - Metrology
   - Prescription writing
   - Pharmaceuticals calculations
   - Principles involved and procedure adopted in dispensing of following remedies
     - 1. Mixtures
     - 2. Pills
     - 3. Lotion
     - 4. Liniments
     - 5. Ointments
     - 6. Eye drops
     - 7. Ear drops
     - 8. Tablet triturate

8. **Experimental pharmacology**
STANDARDIZATION OF DRUGS

Laboratory method and procedures in Homoeopathic Pharmacy
Standardization of drugs and vehicles through analytical methods and techniques
- Biological
- Mechanical
- Chemical
- Toxicological process and characteristics
- Laboratory methods of drug study
- Medical non-medical uses of drugs.

1. Evaporation :- Study of equipments used for evaporation
2. Distillation :- Study of Distillation equipments used for simple, vacumm, steam, Reflexes and molecular distillation. Separation of binary and ternary liquids of similar volatility
3. Drying :- Definition, purpose of drying, theory of drying, loss on drying, moister contents, classification of dryers
4. Mixing :- Fundamentals factors influencing the selection of mixture, mixing mechanism
5. Crystallization :- introduction, principles study of various operations variable in vacumm & growth type crystallization
6. Filtration :- Theory of filtration, filter Medica, Filter acids, selection of filters, various types of filtrations
7. Sublimation
8. Percolations
9. Maceration
10. Microscopic study of trituration
11. Preparation and quantitative detection of drug by computer controlled HPCL and Other sophisticated instruments
12. Quality control & Quality Inspection
13. Role of HPL govt. of India, Ghaziabad
14. Comparison of different systems of pharmacutical with homoeopathic system of pharmaceuticals
15. Microscopic Study, comparative study
16. Microscopic study of decimal, centesimal, 50 millesimal potency
17. 50 millesimal ?

PHARMACOPOEIAS

Historical background & importance of various pharmacopoeias with special reference to those of volumes of Homoeopathic pharmacopocia of India (Vol- I – VII)

2. Sources
   Vegetable kingdom
   Animal kingdom
   Minerals & Chemicals
   Nosodes & Sarcodes.
   Imponderabilia (immaterial)
   Non vegetable, Synthetic sources
3. Pharmacognosy

1. Definition, history, Scope & development
   Phyto – pharmaceuticals of commercial importance
2. Different methods of classification of crude drugs systematic description of crude drug.
3. Cultivation, collection, processing & storage of crude drug
4. An introduction to chemical constituents of drugs, classification, covering carbohydrates, protein, enzymes lipids, volatile oils, phonetic compounds, alkaloids, glycosides etc.
5. An introduction to biogenesis of primary & secondary, plant metabolites.
6. Spectro photometric analysis of Homoeopathic drugs
7. Detections, quality control of crude drugs.
   a. Study of moisture content determination
   b. Extractive values, ash values, determination & analysis of volatile oil, determination of foreign Organic matters
   c. Application of paper & thin layer chromatography
   d. Introduction to HPLC
8. A list of crude drugs of Homoeopathic importance
9. Systematic study of the following products of animal origin (pharmacognostic study, ) cantharides, cochineal, gelatin, cod-liver oil, shark liver oil, bees wax, honey.

PHARMACOGNOSTIC STUDY OF FOLLOWING DRUGS.

1. Leaves- Senna, digitalis, eucalyptus
2. Barks- Cinchona, Cinnamon, Cassia, Cascara, Kurchi
3. Flowers- Calendual, Hibiscus
4. Fruit - Capsicum, Corrinder, Cardamon
5. Seeds – Nux Vomica, Strophanthus, Nutmeg
6. Others – Subletrranean plant
   Rhubarb, Podophyllum, Ginger, Colchicum, Ipecac, Rauwalfia, Aconite
7. Entire organism – Ergot, Belladonna, Dhatura, hyoscyamus
   Unorganized drugs – Aloe, Opium etc.
M.D. PART – II
SYLLABUS OF HOMOEOPATHIC PHARMACY SPECIALITY SUBJECT
PAPER – II

Industrial Pharmacy (Homoeopathy) Homoeopathic Pharmaceuticals its importance


2. Administration
   Principals of Industrial Management in relation of homoeopathic pharmaceuticals (drugs) (remedies) industry
   1. introduction to forms of business originations
   2. Introduction on to concepts of management
      a. Managerial work, function of management
      b. Managerial planning, long term and short term plans
      c. Management by objectives by result by exceptions
      d. Decision making process
      e. Management control systems

3. Production Management
   Goals & Organization
   Plant locations
   Factory building layout
   Operating problem
   Policies
   Purchasing of raw material
   Inventory control

4. Marketing Management
   Distribution
   Homoeopathic Pharmaceuticals (remedies) Market
   Consumer Profile
   Physician Consumer profile

5. Marketing Organization
   Manufacturer – to wholesaler – to retailer

6. Marketing Communication

7. Media For Communication
   Advertising & sale promotion methods

8. Indian Homoeopathic product industry
   Role in national economy and national health?
   Export and import homoeopathic remedies

9. Drug store management
   a. Factor influencing the starting and running of a drug store
   b. Different types & forms of drug stores
   c. Financial requirements
   d. Location of drug store
   e. Store building, construction, furniture and fixture
   f. Internal planning and Layout
   g. Purchase and sales record,
      Sales promotion and advertisement,
      Accounting and correspondence,
      Account ratio and their application books & accounts,
      Journals & ledgers, cash book, balance sheet, profit and loss accounts, principles of costing,
      Estimating elements of double entry
      Qualification of person who is running store,
      Authority & issuing Licenses
DRUG LAWS AND LEGISLATION RELATING TO PHARMACY

1. A basic idea about the Drug & Cosmetic Act 1940 (23rd of 1940)
3. The Drug (control) Act 1950 (26 of 1950)
5. Medicinal and Toilet Preparation (Excise Duties) Act 1955 (16 of 1955)
6. The Poison Act 1919 (12 of 1919)
8. The Pharmacy Act 1948 (8 of 1948).
9. Dangerous Drug Act

General idea about the rules and regulation made under foresaid central acts on the subject and concerned State Act & Regulations.

RELATION OF HOMOEOPATHIC PHARMACY WITH HOMOEOPATHIC MATERIA
MEDICA, ORGANON OF MEDICINE AND NATIONAL ECONOMY

P.G. ACTIVITIES:

1. Journal Reporting
2. Seminars
3. One year Housemen ship with collaboration of Homoeopathic Industries
   I. Visit at least 3 to 4 national level homoeopathic pharmaceuticals eg. Willmar Shwabe, SBL, Backson, Allen and study evolution of different Pharmaceutical procedures, administration, marketing & collect current information of research activity in these pharmaceuticals
   II. Visit HPL, Gaziabad & study Drug standardisation with modern technology – Attend Workshop at HPL
   III. Visit CCRH, New Delhi make a report on their previous and recent research projects, working of various CCRH units in India
   IV. Drug Proving and dispensing at college OPD
   V. Visit one international pharmaceutical.
4) Visit to National and International Pharmaceuticals Industries
5) Visit to HPL (Govt. of India) Ghaziabad