

M.D. (HOM.) PART - II
HOMOEOPATHIC PHARMACY
(Speciality Subject)

M.D. PART – II
SYLLABUS OF HOMOEOPATHIC PHARMACY SPECIALITY SUBJECT
PAPER – I

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. Pharmacokinetic
Absorption, distribution
Biotransformation and excretion of Drugs
Mechanism of drugs action and factors modifying drug actions
Bio availability of drugs
3. Pharmacodynamics
ADR(Adverse Drug Reaction)
 1. Indications
 2. Contra Indications
 3. Side effectsFactors 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, vacuum, 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, moisture 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 vacuum & growth type crystallization
6. Filtration :- Theory of filtration, filter Media, Filter aids, 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 HPLC and Other sophisticated instruments
12. Quality control & Quality Inspection
13. Role of HPLC govt. of India, Ghaziabad
14. Comparison of different systems of pharmaceutical 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 pharmacopoeia of India (Vol- I – VII)

1. Pharmaceutical ethics – related to Homoeopathy General Introduction to the code.
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, phenetic 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- Calendula, Hibiscus
4. Fruit - Capsicum, Coriander, Cardamom
5. Seeds – Nux Vomica, Strophanthus, Nutmeg
6. Others – Subterranean plant
Rhubarb, Podophyllum, Ginger, Colchicum, Ipecac, Rauwolfia, Aconite
7. Entire organism – Ergot, Belladonna, Datura, hyoscyamus
Unorganized drugs – Aloe, Opium etc.

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PAPER – II

Industrial Pharmacy (Homoeopathy) Homoeopathic Pharmaceuticals its importance

1. History of Homoeopathic Industry.
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 LAGISLATION RELATING TO PHARMACY

1. A basic idea about the Drug & Cosmetic Act 1940 (23rd of 1940)
2. The prevention of elicit traffic in Narcotics drug and Psychotropic substance Act 1988 (46 of 1988)
3. The Drug (control) Act 1950 (26 of 1950)
4. The Drug and magic Remedies/Objectionable advertisement Act 1954 (21 of 1954)
5. Medicinal and Toilet Preparation (Excise Duties) Act 1955 (16 of 1955)
6. The Poison Act 1919 (12 of 1919)
7. The Homoeopathy Central Council Act 1973 (59 of 1973)
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 standerdisation 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