

Dispensing Technique-II

Dispensing Technique - II

A. Pharmacy and Pharmacology

1. Definition of drugs, nomenclature of drugs, sources of drugs, dosage and preparations, pharmacopoeias.
2. Incompatibilities.
3. Weights and measures (Metric and Imperial Systems) with symbols and their conversions.
4. Compounding and dispensing of pharmaceutical preparations.
5. Calculations of percentage solution.
6. Reading and writing of prescriptions, including knowledge of parts of prescription.
7. Basic knowledge of important commonly used drugs which will include the following: -
 - a. Classification.
 - b. Names of Official Drugs.
 - c. Preparations, doses, and routes of administration.
 - d. Important uses, contraindications, main toxic effects.
8. Drug Act.
9. Medical Dental Ordinance.
10. Prohibition of Medical Practice Ordinance.
11. Storage of medicines/equipments/instruments.

B. Drug use in different diseases

1. Drugs acting on Autonomic Nervous System (ANS)

- a. Basic concepts of ANS.
- b. Adrenaline, Dopamine, Salbutamol, Ephedrine, Beta Blockers and Methyldopa.
- 2. Drugs used in Glaucoma**
- 3. Drugs used in Angina**
- 4. Drugs used in Hypertension**
- 5. Drugs acting on Respiratory System :**
 - a. Expectorants
 - b. Antitussives
 - c. Bron-Cho dilators
- 6. Antibiotics and Chemotherapeutic Agents**
Sulphonamides, Cotrimoxazole, Penicillin, Cephalosporins, Aminoglycosides, Tetracyclines, Chloramphenicol, Macrolide, Antifungal Drugs, Anti-viral drugs.
- 7. Drugs used in the treatment of Tuberculosis, Leprosy, Amoebiasis, Malaria and Anthelmintics.**
- 8. Drugs Acting on Blood**
Hematinic, Anticoagulants, Heparin
- 9. Drugs acting on Gastrointestinal Tract**
Antacids, Purgatives, Antiemetics, Drugs used in peptic ulcer, Antidiarrheal drugs.
- 10. Drugs acting on Central Nervous System**
Antipsychotic Drugs (Major Tranquilizers), Antianxiety Drugs (Minor Tranquilizers), Narcotic-Analgesics, Analgesics-Antipyretics (Non-Steroidal Anti-Inflammatory Drugs), Alcohol, Hypnotics, General Anesthetics , Local Anesthetics and Analeptics (Nikethamide).
- 11. Treatment of Over-dosage and Poisoning** Morphine, Opioids, Atropine, Strychnine, Insecticides, Kerosine Oil, Acids, Caustics(Alkalis) ,Toxicology, side effects of drugs used.

C. Sterilization

- Principles of sterilization as applied to operation theatre, dressings, hands and skin, preparation of hypodermic injections, syringes.
2. Practical training in emergency procedures and anesthesia.
 3. Charting of temperature and pulse.
 4. Pattern of Treatment Chart, Investigation Forms.
 5. Use of common clinical appliances (Thermometer, BP Apparatus), sterilizer, lumbar puncture needle, splints etc.).
 6. Virus, bacteria, fungus.
 7. Elementary knowledge of sera, vaccines, toxins and antitoxins i.e. anti-tetanus toxoid, anti-diphtheria toxoid, anti-rabic vaccine, anti-snake venom, anti-gas gangrene serum, and vaccines for cholera, typhoid, whooping cough, influenza, poliomyelitis, typhus, plague, T.B., measles etc.
 8. Storage of drugs, vaccines, transportation, their validity, stock taking and labelling.

9. Routine urine, blood and sputum examination and other routine examinations and normal values. Sample collecting for laboratory tests and their proper disposal.

10. Preparation of Emergency Room.

D. Record Keeping and Maintenance of following Registers

1. Charting Temperature, pulse etc.

2. Outdoor Register

3. Abstract Register

4. Poisons Register

5. Expense Register

6. Medicolegal Register

7. Postmortem Register

E. Study of Medicolegal Cases / postmortum

PRACTICALS DISPENSING TECHNICHS HSSC-II

Candidates will be required to prepare and dispense following preparations:

1. Preparations

- a.. Ointment of Sulphur and other skin ointments
- b. Solutions :Potassium Permanganate, Acriflavine, Dextrose Saline Solutions.
- c. Fractional Powder .
- d. Menthol's paint.
- e. Gum paint.

3. Identification of Specimens

Identification of different shapes of the drugs e.g.:

- a. Enteric coated
- b. Sugar coated
- c. Different roots for administration of drugs
- d. Normal values of different tests
- e Identification of different scopes
- f. Physical examination of injectables
- g. Packing and preparation of drugs
- h. Poppy capsules
- i. Belladonna root
- j. Aspirin powder
- k. Sodium bicarbonate
- l. Copper sulphate
- m. Menthol
- n. Thymol
- o. Camphor
- p. Tinct Cardamom
- q. Spirit
- r. Gentian Violet
- s. Acriflavine