

Subject: Pharmaceutical Chemistry II

Theory: 100 hrs.

Minimum number of class tests to be conducted: 03

1. Introduction to the nomenclature of organic chemical systems with particular reference to heterocyclic system containing up to 3 rings.
2. The Chemistry of following Pharmaceutical organic compounds, covering their nomenclature, chemical structure uses and the important Physical and Chemical properties (Chemical structure of only those compounds marked with asterisk)

The stability and storage conditions and the different type of Pharmaceutical formulations of these drugs and their popular brand names.

Antiseptics and Disinfectants – Proflavine, Benzal koniumchloride, Cetrimide, Chloroeresol*, Chloroxylene, Formaldehyde solution, Hexachlorophene. Liquified phenol, Nitrofurantoin.

Sulfonamides – Sulfadiazine, Sulfaguanidine*, Phthalylsulfathiazole, Suceinylsulfathiazole, Sulfadimethoxine, Sulfamethoxyipyridazine. Sulfamethoxazol. Cotrimoxazole, Sulfacetamide*.

Antileprotic Drugs – Clofazimine. Thiambutosine. Dapsone* Solapsone.

Anti-tubercular Drugs – Isoniazid* PAS Streptomycin Rifampicin, Ethambutol, Thiacetazone, Ethionamide, Cycloserine, Pyrazinamide*,

Antiamoebic and Anthelmintic Drugs – Emetine, Metronidazole*, Halogenated hydroxyquinolines, diloxanidefuroate, paramomycin Piperazine, Mebendazole, D.E.C*.

Antibiotics – Benzyl Penicillin* Phenoxy methyl Penicillin*, Benzathine, Penicillin,
Ampicillin, Cloxacillin, Carbenicillin, Gentamicin, Neomycin, Erythromycin, Tetracycline, Cephalexin, Cephaloridine, Cephalothin, Griseofulvin, Chloramphenicol.

Antifungal agents – Undecylenic acid, Tolnaftate, Nystatin, Amphotericin, Hamycin.

Antimalarial Drugs – Chloroquine*, Amodiaquine, Primaquine, Proguanil, Pyrimethamine*, Quinine. Trimethoprim.

Tranquilizers – Chlorpromazine*, Prochlorperazine, Trifluoperazine, Thiothixene, Haloperidol*

Hypnotics:- Phenobarbitone, Butobarbitone, Cyclobarbitone, Nitrazepam, Glutethimide, Methyprylone, Paraldehyde, Triclofos sodium.

General Anesthetics – Halothane, Cyclopropane*, Diethyl ether*, Methohexital sodium, Thiopental sodium, Trichloroethylene.

Antidepressant Drug – Amitriptyline, Nortriptyline, Imipramine*, Phenelzine, Tranylcypromine.

Analeptics – Theophylline, Caffeine*, Coramine* Dextroamphetamine,

Adrenergic Drugs – Adrenaline* Noradrenaline, Isoprenaline*, Phenylephrine, Salbutamol, Terbutaline, Ephedrine*, Pseudoephedrine.

Adrenergic Antagonist – Tolazoline, Propranolol*, Practolol.

Cholinergic Drugs – Neostigmine*, Pyridostigmine, Pralidoxime, Pilocarpine, Physostigmine*

Cholinergic Antagonists – Atropine*, Hyoscine, Homatropine, Propantheline*, Benztropine, Tropicamide, Biperiden*.

Diuretic Drugs – Furosemide*, Chlorothiazide, Hydrochlorothiazide*, Benzthiazide, Urea*, Mannitol, Ethacrynic Acid.

Cardiovascular Drugs – Ethyl nitrite*, Glycerol trinitrate, Alpha methyl dopa, Guanethidine, Clofibrate, Quinidine.

Hypoglycemic Agents – Insulin, Chlorpropamide*. Tolbutamide, Glibenclamide, Phenformin*, Metformin

Coagulants and Anti-Coagulants – Heparin, Thrombin, Menadione*, Bishydroxycoumarin, Warfarin Sodium.

Local Anesthetics – Lignocaine*, Procaine*, Benzocaine

Histamine and Anti-histamine Agents – Histamine, Diphenhydramine*, Promethazine, Cyproheptadine, Mepyramine, Pheniramine, Chlorpheniramine*.

Analgesics and Anti-pyretics-Morphine, Pethidine*, Codeine, Methadone, Aspirin*, Paracetamol*, Analgin, Dextropropoxyphene, Pentazocine.

Non-steroidal anti-inflammatory Agents - Indomethacin*, phenylbutazone*, oxyphenbutazone, Ibuprofen, Thyroxine and Antithyroids-Thyroxine, Methimazole, Methylthiouracil, Propylthiouracil.

Diagnostic Agents – Iopanoic Acid, Propyl iodone, Sulfobromophthalcin.

Sodium Indigotindisulfonate, Indigo Carmine, Evans blue, Congo Red, Fluorescein Sodium.

Anticonvulsants, cardiac glycosides, Antiarrhythmic antihypertensives & vitamins.

