

Syllabus Pharmacy

Unit-I

Manufacturing standard and labeling of tablets, capsules, Aerosol, liquid orals, Ophthalmic and Parenteral preparations.

Physical, Chemical and therapeutic incompatibilities and its rectification methods and principles.

Different methods of sterilization and evaluation of sterile products, sterility testing of pharmaceutical products e.g. sera, vaccines.

Particle size reduction; objective, mechanism involved and methods for particle size reduction, factors affecting the P.S.R. mechanism.

Collection, Processing and storage of various Blood products and plasma substitutions.

Units –II

Pharmaceutical Analysis: Principal and applications of UV/ visible spectroscopy, IR spectroscopy, NMR spectroscopy and chromatography.

Chemotherapeutic agents: Structure, classification, Nomenclature, uses and Mechanism of action of Sulphonamide, Anti-cancerous agents, antibiotics and anti tuberculosis drugs.

Pharmacotherapeutic agent: Structure, classification, Nomenclature, uses and mechanism of action of anti hypertensive, antidepressant and anxiolytic, diuretic, antihistaminic and analgesic.

Unit-III

Brief Pharmacognostic characteristics of some plant Seena, Digitalis, cinnamon, opium, clove, belladonna and Rouwolfia.

Factors affecting variability of drugs phyto constituent's constituents.

Study of drugs containing: Carbohydrate, Alkaloids, and Glycosides.

Identification, purity and quality evaluation of the plant drugs on basis of organoleptic, microscopic, physical, chemical and biological methods.

Biological sources, preparation, identification tests, uses of the following enzymes: Hyaluronidase, Penicillinase, pepsin, Trypsin etc.

Unit-IV

Central Nervous system: Anatomy and Physiology of ANS, Functions of different parts of Brain, reflex action, physiology of nerve impulses, neurotransmitters.

General pharmacology: Routes of Drug administration, absorption, distribution, metabolism and excretion, molecular mechanism of drug action, theories of receptors, Dose response relationship.

Chemotherapy of Malaria, leprosy, Viral and Fungal agents