

PHARMACOGNOSY

Theory (75 hours)

1. Definition, history and scope of Pharmacognosy including indigenous system of medicine.
2. Various systems of classification of drugs of natural origin.
3. Adulteration and drug evaluation; significance of Pharmacopoeial standards.
4. Brief outline of occurrence, distribution, outline of isolation, identification tests, therapeutic effects and pharmaceutical applications of alkaloids, terpenoids, glycosides, volatile oils, tannins and resins.
5. Occurrence, distribution, organoleptic evaluation, chemical constituents including tests wherever applicable and therapeutic efficacy of following categories of drugs.
 - (a) Laxatives: Aloes, Rhubarb, Castor oil, Ispaghula, Senna.
 - (b) Cardiotonics-Digitalis, Arjuna.
 - (c) Carminatives & G.I. regulators -Umbelliferous fruits, Coriander, Fennel, Ajawan, Cardamom Ginger, Black pepper, Asafoetida, Nutmeg, Cinnamon, Clove.
 - (d) Astringents-Catechu.
 - (e) Drugs acting on nervous system-Hyoscyamus, Belladonna, Aconite, Ashwagandha, Ephedra, Opium, Cannabis, Nux vomica.
 - (f) Antihypertensives-Rauwolfia.
 - (g) Antitussives-Vasaka, Tolu balsam, Tulsi.
 - (h) Antirheumatics-Guggul, Colchicum.
 - (i) Antitumour-Vinca.
 - (j) Antileprotics-Chaulmoogra Oil.
 - (k) Antidiabetics -Pterocarpus, Gymnema sylvestre.
 - (l) Diuretics-Gokhru, Punarnava.
 - (m) Antidysentrics-Ipecacuanha.

- (n) Antiseptics and disinfectants Benzoin, Myrrh, Neem, curcuma.
 - (o) Antimalarials-Cinchona.
 - (p) Oxytocics-Ergot.
 - (q) Vitamins-Shark liver Oil and Amla.
 - (r) Enzymes-Papaya, Diastase, Yeast.
 - (s) Perfumes and flavouring agents-Peppermint Oil, Lemon Oil, Orange Oil, Lemon grass Oil, Sandalwood.
 - (t) Pharmaceutical aids-Honey, Arachis Oil, Starch, Kaolin, Pectin, Olive oil, Lanolin, Beeswax, Acacia, Tragacanth, Sodium alginate, Agar, Guar gum, Gelatin.
 - (u) Miscellaneous-Liquorice, Garlic, Picrorrhiza, Dioscorea, Linseed, Shatavari, Shankhapusphi, Pyrethrum, Tobacco.
6. Collection and preparation of crude drug for the market as exemplified by Ergot, opium, Rauwolfia, Digitalis, Senna.
 7. Study of source, preparation and identification of fibres used in sutures and surgical dressings-cotton, silk, wool and regenerated fibre.
 8. Gross anatomical studies of Senna, Datura, Cinnamon, Cinchona, Fennel, Clove, Ginger, Nux vomica & Ipecacuanha.

PRACTICAL (75 hours)

1. Identification of drug by morphological characters.
2. Physical and chemical tests for evaluation of drugs wherever applicable.
3. Gross anatomical studies (T.S.) of the following drugs: Senna, Datura, Cinnamon, Cinchona, Coriander, Fennel, Clove, Ginger, Nuxvomica, Ipecacuanha.
4. Identification of fibres and surgical dressings.