Subject Name: Pharmacognosy

Topic Cover

1. **Carbohydrates and Lipids**
    - Biological sources, salient morphological features, chemical constituents, and uses of: Plantago, bael, chalmooogra oil, neem oil, shark liver oil, cod liver oil, guggul lipids.
2. **Resin**
    - Classification, formation, sources, chemical constituents, identification test, adulterants and uses of: benzoin, peru balsam, tolu balsam, colophony, myrrh, asafetida, jalap, colocynth, ginger, turmeric, capsicum, cannabis, podophyllum.
3. **Tannin**
    - Biological sources, morphology, chemical constituents, chemical test and uses of: Pale catechu, black catechu, nutgalls, Terminalia belerica, Terminalia chebula, Terminalia arjuna.
4. **Drugs of mineral Origin**
5. **Traditional Drugs**
    - Common names, sources, morphology, active constituents and uses (traditional, folklore), pharmacological and clinical uses of: punarnava (Boerhaviadiffusa), shankhpushpi (Convolvulus microphylla), lehsun (Allium sativum), guggul (Commiphora mukul), kalmegh (Andrographis peniculata), tulsi (Ocimum sanctum), valerian (Valerian officinalis), artemisia (Artemisia annua), chirata (Swertia chirata), ashoka (Saraca indica).
6. **Marine Pharmacognosy**
7. **Alkaloids**
    - Nature, classification, biological sources, morphology, chemical constituents, adulterants and uses of: Areca nut, belladonna, hyoscymous, stramonium, duboisea, coca, coffee, tea, cinchona, opium, ipecac, nux vomica, ergot, rauwolfia, vinca, kurchi, ephedra, colchicum, vasaca, pilocarpus, aconite, Solanum xanthocarpum. Biosynthesis of tropane, cinchona and opium alkaloids.
8. **Glycoside**
    - Nature and classification. Biological sources, morphology, chemical constituents, adulterants and uses of: Digitalis, strophanthus, squill, thevetia, oleander, cascara, aloe, rhubarb, senna, quassia, dioscorea, quillaia, glycyrrhiza, ginseng, gentian, wild cherry, withania, bitter almond. Biosynthesis of cardiac and anthraquinone glycosides.