

## PHARMACOGNOSY-IV

PH. 6.7 THEORY

3 hours/ week

### UNIT -I

1. General methods of extraction, isolation and chemical tests of alkaloids.
2. Systematic study of source, cultivation, collection, chemical constituents, adulterants, uses, macroscopic, microscopic features and chemical tests of the following alkaloids containing drugs.

Pyridine-Piperidine	Tobacco, arica and lobelia
Tropane	Belladonna, hyoscyamus, datura, coca and withania.
Quinoline and Isoquinoline	Cinchona, Ipecac, opium
Indole	Ergot, rauwolfia, catharanthus nux-vomica and physostigma
Imidazole	Pilocarpus
Steroidal	Veratrum and kurchi
Alkaloid amines	Ephedra and colchicum
Glycoalkaloid	Solanum
Xanthine alkaloid	Coffee, tea and coca .

### UNIT -II

3. Study of traditional drugs, common vernacular names, botanical source, chemical constituents, uses and marketed formulations (any two) of the following drugs :
4. Amla, Satavari, Bhilwua, bael, bach, rasna, punarnava, gokhru, shankhpusphi, brahmi adusa, arjuna, lahsun, guggul, gymnema, neem ,tulsi, Shilajit and Spirulina.

### UNIT -III

5. Holistic concept in traditional system of medicine. Introduction of ayurvedic preparation like asvas, aristas, guticas, tailas, lehyas and bhasmas.

### UNIT -IV

6. Utilization and production of phytoconstituents such as quinine, calcium sennosides, podophyllotoxin, diosgenin and tropane alkaloids.