

# PHARMACOGNOSY - II

## UNIT - I

- ① Define Basic Metabolic Pathway . Explain in detail about Shikimic Acid Pathway ①
- ② Define Radiotracer Technique . Enlist a few examples of radioactive isotopes that can be used in biogenetic studies or
  - Write in detail about utilization of radioactive isotopes in the investigation of biogenetic studies. ①

## UNIT - II

- ① Describe classification, identification test and properties of Alkaloids .
- ② Define Tannins.
- ③ Discuss biological source, family, chemical constituents and therapeutic uses of :
  - Rauwolfia
  - Vinca
  - Belladonna
  - Opium
  - Lignans
  - Tea
  - Ruta
  - Digitalis
  - Mentha
  - Clove
  - Ginger
  - Asafoetida
  - Senna
  - Aloe
  - Cinnamon
  - Liquorice

### UNIT - III

- ① Define Resins. Discuss isolation of Podophyllotoxin & Curcumin (U)
- ② Define Alkaloids. Discuss, isolation & identification of Atropine, Quinine, Reserpine, Caffeine. (U)
- ③ Define isolation & analysis of Menthol, Citral & Artemisinin (V)
- ④ Define isolation of Rutin

### UNIT - IV

- ① Define Industrial Production, Estimation and utilization of :
  - Sennoside. (U)
  - Artemisinin
  - Digoxin (U)
  - Atropin (V)
  - Caffeine (V)
  - Toxin
  - Vinblastin

### UNIT V

- ① Define Extraction. Elaborate Modern Method of Extraction in detail. (U)
- ② Define Chromatography. Explain various chromatographic techniques & their application in isolation of phytoconstituents. OR (U)
- ③ Explain role of TLC & HPTLC in isolation & purification of phytoconstituents.
- ④ Define Application of Spectroscopic techniques in identification of crude drugs.