

UNIT – I

Methods of systematic phytochemical analysis including extraction and identification of plant constituents using chromatographic techniques.

Quality control of crude drugs : proximate analysis including ash and extractive values, crude fibre content, U.V. and fluorescence analysis of powdered drugs.

UNIT – II

Qualitative & quantitative microscopy and microchemical tests.

Detection of common adulterants and insects infestation in whole and powdered drugs.

UNIT – III

Analysis of official formulations derived from crude drugs including some Ayurvedic preparations.

Brief study of quality control of plant-products and their high-throughput screening.

UNIT – IV

Microbiological screening methods for antimicrobial activity.

WHO guidelines for the quality control of raw materials used in herbal formulations.

REFERENCES:

1. Pharmacopoeia of India
2. Textbook of Pharmacognosy by Trease & Evans.
3. Textbook of Pharmacognosy by Tyler, Brady & Robber.
4. Phytochemical Methods by J.B.Harborne
5. Instrumental methods of Analysis by Willard, Merrit, Dean
6. Pharmacopoeal standards for Ayurvedic Formulation (Council of Research in Indian Medicine & Homeopathy)
7. Application of Absorption spectroscopy in Organic compounds by J.R.Dyer.
8. The Quantitative Analysis of Drugs by D.C.Garrat.
9. Analytical Microbiology by Kavanaagh.F.
10. Microbiological Assays by Barton J.Wright.