

HERBAL MEDICINE

Skill Based Elective I (Semester V)

Ethno Medicine

Unit I

Ethnomedicine – definition, history and its scope – Inter disciplinary approaches in ethnobotany – Collection of ethnic information.

Unit II

Importance of medicinal plants – role in human health care – health and balanced diet (Role of proteins, carbohydrates, lipids and vitamins).

Unit III

Tribal medicine – methods of disease diagnosis and treatment – Plants in folk religion – *Aegle marmelos*, *Ficus benghalensis*, *Curcuma domestica*, *Cyanodon dactylon* and *Sesamum indicum*.

Unit IV

Traditional knowledge and utility of some medicinal plants in Tamilnadu – *Solanum trilobatum*, *Cardiospermum halicacabum*, *Vitex negundo*, *Adathoda vasica*, *Azadirachta indica*, *Gloriosa superba*, *Eclipta alba*, *Aristolochia indica* and *Phyllanthus fraternus*.

Unit V

Plants in day today life – *Ocimum sanctum*, *Centella asiatica*, *Cassia auriculata*, *Aloe vera*. Nutritive and medicinal value of some fruits (Guava, Sapota, Orange, Mango, Banana, Lemon, Pomegranate) and vegetables - Greens (*Moringa*, *Solanum nigrum* Cabbage).

References

Ethnobiology – R.K.Sinha & Shweta Sinha. Surabhe Publications – Jaipur. 2001

Tribal medicine – D.C. Pal & S.K. Jain Naya Prakash, 206, Bidhan Sarani, Calcutta , 1998

Contribution to Indian ethnobotany – S.K. Jain, 3rd edition, Scientific publishers, B.No. 91, Jodhpur, India. 2001

A Manual of Ethnobotany – S.K.Jain, 2nd edition, 1995.

Skill Based Elective - II (Semester – V)

Pharmacognosy

Unit I

History, Definition and scope of pharmacognosy; Systems of Indian Medicines – Siddha, Unani, Ayurveda, Homeopathy; Terminologies.

Unit II

Classification of Crude drugs – Taxonomical, Morphological, Pharmacological and chemical classifications; Chemistry of drugs and its evaluation.

Unit III

Preparation of crude and commercial drugs. Making infusion, decoction, lotion, washers, insect repellents, suppositories, tincture, making herbal syrups, compresses, poultice, plasters, ointments, herbal oils and herbal salves. Surgical fibres, sutures and dressing.

Unit IV

Organoleptic study of the following medicinal plants: Fruit – Amla, Bulb – Garlic, Rhizome – Ginger, seed – castor, Bark – Cinchona, Leaves – Neem, Flower – Clove.

Unit V

Analytical Pharmacognosy – drug adulteration and detection. Biological testing of herbal drug. Phytochemical investigations with reference to secondary metabolites of locally available medicinal plants.

References

Pharmacognosy, S.B.Gokhale, Dr.C.K. Kokate, A.P. Purohit, Publisher: Nirali Prakasham, Pune, 2002
Herbs that Heal, Acharya Vipul Rao – Diamond Pocket Books, New Delhi, 2005
Practical Pharmacognosy. Dr.C.K. Kokate et al. 2003
An Introduction to Medicinal Botany and Pharmacognosy – N.C. Kumar, Emkay Publications, New Delhi, 2004.

Skill Based Elective - III (Semester – V)

Herbs and Drug Action

Unit I

Terminologies – Definitions – Classification of medicinal plants based on their effects with special reference to India.

Unit II

Allergens – types – sources – active principles – Chemical nature – Cell modifiers – Lectins – mutagens, teratogens – Allergic reactions with known examples.

Unit III

Drugs acting on brain and nervous system – Rheumatic arthritis – Psychoactive drugs – Depressants, Stimulants, hallucinogens – sources, effects, basic mechanism of action.

Unit IV

Cardiovascular diseases – blood pressure – cardiac drugs of plant origins – alkaloids, anticoagulants – basic mechanism of action. Pulmonary / respiratory disorders – asthma – bronchitis – common cold – allergy – Remedy from plants.

Unit V

Drugs for urinogenital disorders – roots of *Withania somnifera* – Memory stimulants – *Centella asiatica* – Drugs for dissolving kidney stones – *Musa paradisica* (pseudostem) – Antiinflammatory drugs – *Cardiospermum* – Anticancer drugs – *Catharanthus roseus*.

References

Kumar, N.C., An Introduction to Medical botany and Pharmacognosy. Emkay Publications, New Delhi. 1993
Rao, A.P. Herbs that heal. Diamond Pocket Books (P) Ltd., New Delhi, 1999