

Advance Technique in Pharmacology and Pharmacogenomics

1. Nama, Rupa, Guna and Yukti Jnana of Ausadha Dravyas
2. Adulterants, Substitutes and Controversial Drugs in Ayurveda.
3. Advanced technologies in analytical study like Genetic markers, HPTLC, etc;
4. Knowledge on advanced modern pharmacognostical tools
5. Advanced experimental pharmacological studies include –cell line studies etc;
6. Practical knowledge on tissue culture techniques;
7. Detailed knowledge about new branches like Pharmacogenomics, Drug designing, molecular biology, biotechnology, nano technology;
8. Detailed knowledge about Nutraceutical, cosmoceuticals, phytoremediation techniques etc; Knowledge in advanced pharmaceutical techniques;
9. Practical knowledge about standardization of ayurvedic drugs
10. Knowledge of biodiversity, endangered medicinal species.
11. Knowledge of TKDL, Introduction to relevant portions of Drugs and cosmetic act, Magic remedies Act, Intellectual Property Right (IPR) and Regulations pertaining to Import and Export of Ayurvedic drugs.
12. Knowledge of tissue culture techniques. Knowledge of Genetically Modified Plants

Knowledge about Medicinal Plant Research

1. Utilization of agricultural techniques in medicinal plant cultivation;
2. Detailed knowledge about genetically modified plants and its application in medicinal plant research; Rasa panchaka analysis –using advanced pharmacological techniques;
3. Detailed knowledge about plant toxicology;
4. Knowledge about the addition of new drugs in pharmacopeia.
5. Knowledge in the field of food and nutrition, dietetics;
6. Knowledge about latest publication in the field;
7. Pharmacological principles and knowledge on drugs acting on various systems.
8. Basic knowledge on experimental pharmacology for the evaluation of - analgesic, anti pyretic, anti inflammatory, anti diabetic, anti hypertensive, hypo lipidemic, anti ulcer, cardio protective, hepatoprotective, diuretics, adaptogens, CNS activites.
9. Knowledge of clinical pharmacology and clinical drug research as per GCP guide lines.
10. Knowledge of plant extracts, colors, flavors and preservatives. Review of important modern works on classical medicinal plants published by Govt of India, department of AYUSH and ICMR.

TEXT BOOKS/ REFERENCES:

1. Abhinav Buti Darpan (Vol.1-2) - Vd. Roop Lal Vaishya
2. Aushadna Vigyna Shastra - Acharya Pt. Vishvanatha Dwidevi
3. Ayurvediya Aushadnkarma vigyana - Acharya V.J. Thakur
4. Bedi Vanaspati Kosha - Prof. Ramesh Bedi
5. Bhaishajyaguna Vigyana - Dr. Alakhnarayan Singh
6. Bhav Prakash Nigantu (English) – Shreekanthamurti
7. Bhav Prakash Nighantu - With Vd. Krishna Chandra Chunekar commentary
8. Bhrinad dravyagunadarsha - Mahendra Kumar Shastr
9. Classical Uses of Medicinal Plants - Acharya Priyavrata Sharma
10. Controversial Medicinal Plants - Vd. G. Bapa Lal
11. Dalhana Ka Dravyaguna Shastra Ke Kshetra Me Yogadana - Vd. Shiv Kumar Vyas
12. Pharmacological basis of Medical Practice - Goodman & Gillman
13. Pharmacology and Pharmacotherapeutics - Satoskar Bhandarkar & Ainapure