## DRAVYAGUNA 6-day CME for Teachers Module

Unit	Торіс	Course contents	Duration in Hours
1.	Fundamental principles of Dravyaguna	Definition of Dravya and its scope. Parameters for Panchbhautik composition of Dravya (substance), Role of Panchamahabhuta of a dravya in relation to health and disease. Scientific explanation of fundamental principles of Dravyaguna based on Practical understanding of Pramana Chatushtaya- Aptopadesha, Pratyaksha, Anumana and Yukti.	1 <sup>1</sup> / <sub>2</sub> Hour
2.	Dravya as Ahara (diet) and Aushadha (Drug) in healthy and diseased state of body.	Mechanism of action of ahara dravya. Mechanism of action of aushadha dravya. Explain the difference between Ahara and Aushadha as well as incompatibility of Ahara and Aushadha dravya and their toxic manifestations.	1½ Hour
3.	Trividha Dravya- Dosha prashamanam, Dhatu pradusanam and Svasthhita	Application of Vata-, Pitta- and Shleshma samshaman dravya. Drugs effecting dhatu pradushan and swasthahita and their clinical relevance. Role of drugs of swasthahita and their importance in maintaining the healthy state of body and mind.	1 <sup>1</sup> /2 Hour
4.	Pharmaco-therapeutical classification - according to Charak, Sushrut and other texts.	Analysis the actions of drugs explained under the pharmaco-therapeutic classification given by Charak. Analysis the actions of drugs explained under the pharmaco-therapeutic classification given by Sushrut.	1 <sup>1</sup> /2 Hour
5.	Nomenclatureandsynonymbasedidentification of classicaldrugs.	Importance of basonym and synonyms of drugs in relation to identification, and their importance and characterization. Properties, action and therapeutic uses. Etymological derivation of Sanskrit and botanical names of drugs with examples.	1½ Hour
6.	Family-wise botanical identification of important plants	Explain the common and differentiating characteristics of drugs of same family. Macro- and microscopic identification of useful part of plant drugs.	1 <sup>1</sup> / <sub>2</sub> Hour
7.	Rationality of Agrya- aushadhi explained in texts of Charak, Sushrut and Vagbhat.	Rationality of Agrya-aushadhi substantiating through research outcome, where-so-ever possible. Explain the basis of agrya aushadhi concept with examples.	1 <sup>1</sup> ⁄2 Hour
8.	Useful parts of plants and Use of alternative parts and substitute plant drugs in the formulations and their standardization.	Criteria for selection of alternate/substitute plant drug parts of same/different plants in place of genuine drugs. Study of morphological and microscopic characteristics of alternate / substitute plant drugs.	1 <sup>1</sup> / <sub>2</sub> Hour

9.	Pharmacognosy & Knowledge on Quality Standards of Medicinal Plants of Ayurveda	Macroscopic and microscopic description of useful part and powdered drugs. Chemical constituents (major), and leading biological marker in relation to safety, efficacy and quality. TLC identity test, Analytical method- High performance thin layer chromatography, Quantitative Standards,	1 <sup>1</sup> / <sub>2</sub> Hour
10	Knowledge on Quality Standards of Medicinal Plants of Ayurveda	Biological markers, Biological standardization Scientific evaluation and understanding of different dosage forms explained in Ayurvedic samhitas.	1 <sup>1</sup> /2 Hour
11	Rasa, guna, virya, vipaka and prabhava of drugs	Scientific understanding of rasa, guna, virya, vipaka and prabhava Objective parameters, if any, of determining rasa panchaka, and their recent research results. Clinical application of Rasa Panchaka.	1½ Hour
12	Pharmacology	Ayurvedic mode of action vis-à-vis modern pharmacological action of drugs including receptor- pathways. Principles of modern general pharmacology.	1 <sup>1</sup> /2 Hour
13	Visha dravyas:	Ayurvedic methods of purification of drugs and study of changes and their assessment. Toxicity studies and their standardization, Therapeutic category and safety aspect.	1½ Hour
14	Incompatibility of ahara and aushadha dravys and their toxic manifestations	Administration of drug, dosage, incompatibility, time of administration, anupan and its importance.	1 <sup>1</sup> / <sub>2</sub> Hour
15	Controversial drugs	Discussion and decisions on commonly used controversial drugs.	1 <sup>1</sup> /2 Hour
16	Pharmacoepias and Formularies, Popular Publications and IT sources on medicinal plants	Study on important/ popular compound formulations of Ayurveda. Knowledge of Ayurvedic Pharmacopoeia of India and other Pharmacopoeias. Knowledge on publications of CSIR, ICMR and other scientific institutions on medicinal plants. Information Technology sources (popular websites) on medicinal plants like NISCAIR, CSIR, ICMR etc.	1½ Hour
17	Promotion and preservation of medical plants, Herbarium	Cultivation and propagation of common medicinal plants. Collection and preservation/storage techniques of medicinal plants, Preparation of herbarium and museum specimens. List of best herbaria, museums and gardens all over the country. List of good scientific journals publishing articles on medicinal plants.	1½ Hour

18	Drugs and Cosmetic Act, 1940 and other information on TKDL NMPB etc.	Drugs and Cosmetic Act, 1940 - Introduction and its importance, Misbranded, adulterated and spurious drugs, various amendments related to drugs in Act. Workable knowledge on IPR and Patent Law. Knowledge on Traditional Knowledge Digital Library (TKDL). National Medicinal Plants Board, Knowledge on Agricultural practices of Medicinal Plants	1 <sup>1</sup> / <sub>2</sub> Hour
19	Anukta dravyas	Knowledge on Extra Pharmacopoeial drugs (anukta dravya) and drugs like stevia, gingko etc. and methods, ways/means to document them. Awareness on genetically modified medicinal plants commonly used in Ayurveda and hazards.	1½ Hour
20	Pharmaco-vigilance and Drug Interactions	<ul> <li>What is Pharmaco-vigilance? And its significance in therapeutic practice.</li> <li>Ways and means of observing pharmaco-vigilance.</li> <li>Status of Pharmaco-vigilance in Ayurvedic practice.</li> <li>WHO guidelines on Pharmaco Vigilance.</li> <li>National Pharmaco - vigilance council.</li> <li>Concept importance of knowledge of drug interaction in Ayurveda with its Practical utility.</li> </ul>	1 <sup>1</sup> / <sub>2</sub> Hour
21	Visit to gardens	Demonstration of medicinal plants in natural environs	6 Hours
	Pre and Post training assessment	Assessment and Feedback forms may be given to participants before the commencement of sessions, so that they fill the forms at the end of each session/day and put them in sealed envelops.	01 hour
		TOTAL	37 Hours