J.S. University, Shikohabad

Established by UP Govt. Act No. 07 of 2015

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Value added course

Certificate Course in Herbal Science

Course code -VAC-145

2021-22

Faculty of Science



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Certificate Course in Herbal Science

Learning Objectives-

- Be able to identify medicinal plants (family/genus -level).
- identify by name and understand the effects of plant chemical constituents on humans
- Be able to find reliable information about medicinal plants and herbal supplements at the library or on the internet.
- Demonstrate understanding of the importance of medicinal plants among different cultures through clear, logical writing.
- Demonstrate how different cultures approach plant use in different ways and how plants and people interact.
- apply basic ethno botanical techniques to the study of a specific cultural use of medicinal plants

Duration - 30 hrs

Course Outcome- After compelition of the course the student shall be able -

- To know the Historical background , present status, scope of herbal science
- To gain knowledge about Ayurveda, siddha, unani, Homeopathy medicines
- To identify the plants with medicinal importance
- To understand the Herbarium techniques, and importance of Herbal garden
- To learn about biodiversity conservation with special reference to ex-situ and in-situ
- To have practical knowledge of locally available medicinal plants.

Syllabus Outline

Module- I

- 1. Historical background, present status, scope of herbal science
- 2. indigenous medical system bio prospecting knowledge systems Ayurveda, siddha, unani, Homeopathy medicines
- 3. Need to preserve Knowledge systems.

Module- II

- 1. Meaning & scope of Aromatherapy, cosmetology and flower essence therapy.
- 2. Plant identification elementary knowledge of binomial nomenclature, outline of Bentham and Hooker classification
- 3. Herbarium techniques, Herbal garden, use of flora and keys for plant identification.

Module-II



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1. Taxonomic structure and general outline classification of major groups of plants as algae, fungi, bryophytes, pteridophytes, gymnosperms and their medicinal uses.

Module-IV

- Herbal Endangered Plants Efforts and initiatives to conserve 1. biodiversity with particular reference to conservation of flora
- 2. Unexploited plants of potential economic value with special reference to U.P.
- Strategies for conservation in situ and ex- situ, Red data book and green 3. data book.

Module-V (Practical)

- Identification of locally available medicinal plants 1.
- 2. Preparation of herbarium sheets of medicinal Plants

Suggested Books & References-

- Sharangi, A. B. (2019). Handbook on Medicinal Plants.
- Jain, S.K. (1968). Medicinal Plants. National Book Trust, India, New Delhi.
- Duke, J. A. (2002). Handbook of medicinal herbs. CRC press.
- Andersen, P.H., Jensen, N.J. Mutagenic investigation of peppermint oil in the Salmonella/mammalian-microsome test. Mutat Res. 1984;138:17-20
- Foster, S., Duke, J. (1990). A field guide to medicinal plants. Boston (MA): Houghton Mifflin Co.; p. 190.
- Franzios, G., Mirotsou, M., Hatziapostolou, E., Kral, J., Scouras, Z. G., & Mavragani-Tsipidou, P. (1997). Insecticidal and genotoxic activities of mint essential oils. Journal of Agricultural and Food Chemistry, 45(7), 2690-2694.
- List PH, Hörhammer L, editors (1976), Hagers handbook of pharmaceutical practice. 4th Ed. Berlin: Springer-Verlag; Vol 5, p. 20.

or Hand

Course coordinator

(Name of Faculty) Dean Academics

AKLILER

Director/Principal/Dean of

Faculty/Department

Dar B. P. J

Chauhan