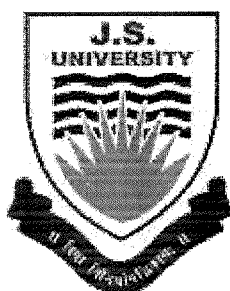


J.S. University, Shikohabad

Established by UP Govt. Act No. 07 of 2015

Recognized by U.G.C. under section 2 (f) of Act-1956



Value added course

Impact of Medicinal Plants on Society

Course code – VAC-185

2022-23

Faculty of Science



J.S. University, Shikohabad
Faculty of Science

Value added course
2022-23

Impact of Medicinal Plants on Society

Learning Objectives–

To acquire knowledge on medicinal plants

Duration – 30 hrs.

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

- Understand the drug extraction methods.
- Know various chemical components present in the plants.
- Identification of plants.
- Preparation of herbarium.
- Understand the post-harvest technology of herbs.

Syllabus Outline

Module- I

1. Medicinal plants and their importance and scope.
2. Classification of medicinal plants
3. Cultivation of medicinal plants – processing and utilization
4. Chemical nature of crude drugs – extraction
5. Preparation of crude drugs. Ayurveda
6. Siddha and Unani systems of herbal medicine.

Module- II


1. Traditional herbal teas. Herbs for woman, babies, children
2. Herbal garden, home and school gardens.

Module-III

1. Classification and estimation of primary metabolites and carbohydrates
2. Fatty acids, amino acids and proteins.

Module-IV

1. Plants defense mechanism
2. Antioxidants – Reactive Oxygen Species – enzymatic and non – enzymatic antioxidants
3. Role of antioxidants – Estimation of antioxidant.

	<p align="center">J.S. University, Shikohabad Faculty of Science</p>	<p align="center">Value added course 2022-23</p>
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4. Ascorbic acid, Alpha Tocopherol. Antioxidant

Module-V

1. Post – harvest technology in medicinal plants and its scope and importance.
2. Importance of herbal marketing – Future prospects and constraints of herbal drug industry.
3. Regulatory status of herbal medicine in India. Adulteration with reference to plant drug. Types of adulterants and methods of adulteration.

Practicals –

1. Estimation of carbohydrates.
2. Estimation of proteins.
3. Estimation of fatty acids.
4. Estimation of phenols.
5. Estimation of flavonoids.
6. Preparation of crude extracts.
7. Herbarium preparation.
8. Estimation of Ascorbic acid and alpha tocopherol.

Text Books –


Farooqi, A.A. and B.S. Sreeramu, 2004. Cultivation of medicinal and aromatic crops. Revi: edition, Universities Press (India) Private Limited Hyderabad.

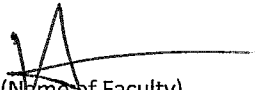
Harbone, J.B. 1999. Phytochemical methods: A guide to modern techniques of plant analysis. 111rd Ed., Springer (India) Private Limited, New Delhi.

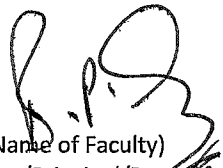
Supplementary Reading –

WHO, 2002. Quality control methods for medicinal plant materials. World Health Organization Geneva, A.I.T.B.S. Publishers and Distributors, New Delhi.

Halliwalli, B. and J.M. Gutteridge. 1985. Free radicals in Biology and Medicine. Oxford University Press.


(Name of Faculty)
Course coordinator
Dr. Naveen
Yadav


(Name of Faculty)
Dean Academics,
Dr. Akhilesh


(Name of Faculty)
Director/Principal/Dean of
Faculty/Department
Dr. B.P. J
Chauhan