

GOVT. DIGVIJAY AUTONOMOUS P
COLLEGE RAJNANDGAON (C.G.)



SYALLABUS & MARKING SCHEME

FOR

M.Sc. BOTANY

YEAR

2021-22

DEPARTMENT OF BOTANY

PBOET-404
2021-22 407



M.Sc. (Botany) IV SEMESTER
Elective Paper
PAPER - III
80

M.M. -

ETHNOBOTANY-I

UNIT I

- Ethnobotany: History, general account and its sub disciplines.
- Interdisciplinary approaches & aim of ethno botany.
- Ethnobotany with special reference to Chhattisgarh.
- Ethnobotanical Research done in India:
- Ethnobotany in relation to national priorities and health care programme.
- Practical application of ethnobotany for tribal development programme.

UNIT II

- Methods and techniques in ethnobotany.
- General account of major and minor tribes of Chhattisgarh with special reference to Gond, Kamar, Baiga, Abujhmaria.
- Ethnobotanical aspect of art and literature.
- Ethnobotany with special reference to folklore.

UNIT - III

- Ethnobotanical importance of Bacteria, Algae, Fungi, Bryophyta, Pteridophyta and Gymnosperm.
- Ethnoveterinary medicines from plants.
- Major & Minor Forest Products (NWFPs) of Chhattisgarh.
- Ethnobotany in relation to livelihood security reference to tribes.

UNIT - IV

- Ethnobotanical study of following plants with special reference to their medicinal importance 1. Azadirachta indica (Neem) 2. Emblica officinalis (Amla) 3. Ricinus communis (Andi) 4. Madhuca indica (Mahua) 5. Cassia fistula (Amaltash) 6. Ficus religiosa (Pipal) 7. Oscimum sanctum (Tulsi) 8. Asparagus racemosus (Satavar) 9. Aloe vera (Ghrith kumari) 10. Andrographis paniculata (Bhui neem).

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PAPER -III

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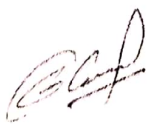
Dr. G.S Thakur
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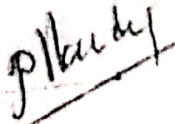
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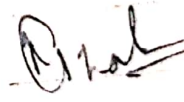


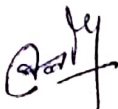
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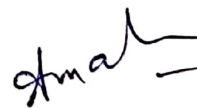
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- Martin, G.J. (1995). Ethnobotany. Chapman and Hall, London. Suggested Laboratory

Exercises:-

1. Description and identification of medicinal plants and its medical properties.
2. Preparation of medicinal plants herbarium and photographs.
3. Herbal preparation:- a. Extract of Tulsi leaves. b. Ointment from Neem Leaves. c. Ayurvedic tooth powder. d. Face pack preparation from various herbs. e. Preparation of Triphla. f. Kwath of Triphla. g. Preparation of diabetes controlled powder. h. Preparation of herbal shampoo.
4. To cultivate at least two medicinal plant in earthen pot.
5. Field Study of Forest area or Tribal area.
6. Documentation technique of Ethnobotanical knowledge.
7. To separate active principles from the extract of Medicinal plant.

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PBOET-408

2021-22

M.Sc.(Botany) IV SEMESTER
ELECTIVE PAPER
PAPER -IV
ETHNOBOTANY - II



M.M. 80

UNIT - I

- Plant Conservation by Tribes and role of Joint Forest Management Programme in Plant Conservation specially People's Protected Area
- Ethnobotany and its role in domestication and conservation of native plant and genetic resources.
- The protection of plant varieties.
- General account of conservation of medicinal plants.
- General role of Aromatic plants.

UNIT -II

- General ideas of various system of medicine using plants.
- Basic knowledge of Ayurvedic, Homeopathic, Allopathic system of medicine.
- General idea of active principles of Plants.
- Herbal Cosmetics.
- General account of toxic plants and Harmful effect of plants on human society with special reference to allergic plants of Chhattisgarh.

UNIT -III

- Endemic plants of Chhattisgarh.
- Endangered plants of Chhattisgarh.
- Techniques of cultivation and marketing of Aromatic plants -Podina, Lemon grass.
- Techniques of cultivation, marketing and importance of mushroom
- Techniques of cultivation, extraction of juice and importance of wheat grass.

UNIT -IV

- Ethnobotanical study of the following plants with special reference to their medicinal importance. 1. Allium sativum (Lahsun) 2. Aegle marmelos (Bel) 3. Terminalia arjuna (Arjun) 4. T. bellerica (Bahera) 5. T. chebula (Harra) 6. Chlorophytum borivianum (Safed Musli) 7. Thuja occidentalis (Vidhya) 8. Dhatura alba (Dhatura) 9. Argemone maxicana (Pili kateli) 10. Moringa oleifera (Munga).

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Exercises:-

1. Description and identification of medicinal plants and its medical properties.
2. Extraction of phytochemicals from various medicinal plants.
3. Preparation medicinal plants herbarium and photographs.
4. Herbal preparation – a. Preparation of digestive powder. b. Mouth freshener of Ajwain. c. Beverage of Tulsi, Bel, Tikhur, Mango. d. Ayurvedic tea preparation. e. Tablet of amla vati. f. Murabba of Awla/Bel. g. Herbal dye h. Shitopladi powder.
5. Identification and study of Ethnobotanical importance of some plants of Rajnandgaon.
6. To cultivate at least two medicinal plant in earthen pot.

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PROEL-409

2021-22

Project (Optional)



Project Work	External	Internal	Total
Dissertation	240	60	300
Seminar based on project	160	40	200
Viva-voce	80	20	100
Total			600

1. A Student of IV Semester will have the option to opt for project work in lieu of four theory papers and two lab courses provided.
2. He/she secures at-least 65% or more marks in aggregate in semester I and II Semester.
3. The project has to be carried out in recognized national laboratories or UGC recognized universities or any other reputed organization of public and private concern.
4. The valuation of all the projects will be carried out by the external examiner.

The project work should be related to the field of Botany. The project report should include declaration by the candidate, certificate by the supervisor, acknowledgement, title and introduction along with the following points.

1. Introduction.
2. Review of Literature.
3. Materials and Methods.
4. Results and Discussion.
5. Summary.
6. Bibliography.

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