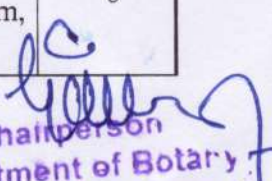


O.E.C. (Plants & Humans) offered by Department of Botany								
Semester-III								
Part A - Introduction								
Course Type	Course Code	Course Nomenclature	Credits	Hrs./ week	Int. Asst.	End Term Marks	Max. Marks	Exam Duration (Hrs.)
OEC	24L6.5-OEC-BOT-301	Plants & Humans	2	2	15	35	50	2
Level of the Course: 500-599								
Pre-requisite for the course (if any):								
Learning Objective: Learner will able to understand the intricate relationship between plants and humans from a genetic perspective, including the co-evolutionary processes and mutual dependencies. Explore how plants contribute to human health and well-being through the production of bioactive compounds, medicinal properties and nutritional value.								
Course Learning Outcomes (CLO): After completing this course, the learner will be able to- 1. understand the interactions between plants and humans in ecological, economic and cultural contexts. 2. analyze the role of plants in providing food, medicine, shelter and ecosystem services to human societies. 3. evaluate the impact of human activities on plant biodiversity, conservation efforts and sustainable utilization of plant resources. 4. apply knowledge of plant-human interactions to address challenges such as food security, environmental degradation and climate change mitigation.								
Mapping of CLO with PSO for Plants & Humans								
CLO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CLO1	☒	☒	☒			☒		☒
CLO2	☒	☒	☒					☒
CLO3		☒	☒		☒	☒		☒
CLO4		☒	☒			☒		☒
Part B - Content of the Course								
Instructions for Paper- Setter: 1. There shall be nine questions in all. Question no. 1 shall be compulsory (taking CLO into consideration), consisting of eight short answer type questions covering the entire syllabus. Two questions will be asked from each unit. 2. The examinee will be required to attempt 5 questions, the compulsory question and selecting one question from each unit. All questions will carry equal marks.								
Unit	Topics							Contact Hours
I	Plants and Civilization: Origin of agriculture, origin of crop plants, idea about the center of origin of common crop plants. Cereals and Pulses: Minor cereals, major cereals, pseudocereals and pulses.							7
II	Spices and Condiments: Use of saffron, clove, cardamom, ginger, cinnamon, asafetida, coriander. Medicinal Plants: Importance of medicinal plants (sarpagandha, isabgol, neem, bhringraj, amla, turmeric) and their role in human healthcare.							8


 Chairperson
 Department of Botany
 Indira Gandhi University
 Meerpur, Rewari

III	Psychoactive Plants: General account and classification of psychoactive plants. Nutritive and Medicinal Value: Nutritive and medicinal value of some fruits and vegetables (mango, banana, potato, cabbage).	8
IV	Beverages and Ornaments: Beverages (coffee, tea, chocolate), common ornamental plants. Timber and Fibers: Common food adulterants, common timber yielding plants; general account of fibers, dyes, tannins, gums and resins.	7

Suggested Evaluation Methods

Internal Assessment: 15	End Term Examination: 35
❖ Theory ✓ Class Participation: 5 ✓ Seminar/ Presentation/ Assignment/ Quiz/ Class Test/ Peer-group discussion etc.: 5 ✓ Mid-Term Exam: 5	❖ Theory ✓ Written Examination: 35

Part C - Learning Resources (Recommended Books/ e-resources/ LMS)

- Smith, J. & Brown, A. (2018) Plants & Humans: A Comprehensive Guide. Springer (Berlin), pp. 350.
- Thompson, E. & Johnson, K. (2020) Plants & Humans: An Interdisciplinary Approach. Wiley-Blackwell (Oxford), pp. 400.
- Davis, R. & White, L. (2016) Plants & Humans: Exploring Connections. Pearson (New York), pp. 280.
- Robinson, M. & Harris, P. (2019) Plants & Humans: From Ancient Times to Modern Perspectives. Routledge (London), pp. 320.
- Simpson, B.B. & Ogorzaly, M.C. (2013) Economic Botany: Plants in Our World (4th Edn.). McGraw-Hill Education (New York), pp. 544
- Kochhar, S.L. (2016) Economic Botany: A Comprehensive Study (5th Edn.). Cambridge University Press (Cambridge), pp. 680.
- Sambamurty, A.V.S.S. (2009) Economic Botany in the Tropics. New Age International (P) Limited Publishers (New Delhi), pp. 400.
- Maheshwari, J.K. (2000) Ethnobotany and Medicinal Plants of Indian Subcontinent. Scientific Publishers (Jodhpur), pp. 344.
- Singh, P. & Sharma, S. (2018) Plants & Humans: Traditional Knowledge and Modern Applications. Himalaya Publishing House (Mumbai), pp. 300.
- Reddy, K. & Rao, S. (2017) Plants & Humans: Sustainable Practices and Conservation Strategies. McGraw-Hill Education (India), pp. 320.
- Gupta, A. & Singh, V. (2020) Plants & Humans: Medicinal and Nutritional Perspectives. PHI Learning Pvt. Ltd. (New Delhi), pp. 350.
- Mishra, R. & Tiwari, P. (2016) Plants & Humans: Environmental Challenges and Solutions. Oxford University Press India (New Delhi), pp. 300.
- <https://www.eolss.net/sample-chapters/c09/E6-118-01.pdf>.
- <https://botany.org/home/resources/plant-talking-points/what-is-economic-botany.html>.
- <https://bsi.gov.in/page/en/ethnobotany>.

Chaitanya
Department of Botany
Indira Gandhi University
Meerpur, Rewari