BOTANY DEPARTMENT

Course Outcomes (COs), **Program: 3 yr MDC (NEP2020)** Botany

Sl. No	Course	Semester	Course Code	Credit	Marks	Course outcome	Skill Development related to employability and Entrepreneurship development
1	Plant diversity (theory)	1	BOT-MD-CC-1-1-TH	3	75	They can get a overall knowledge of different plant groups found in universe. • Knowledge on lower plant groups like algae, fungi, bryophytes and pteridophytes. Also they aware about gymnosperm and angiosperms. • Students can implement the knowledge of economical, medicinal, agricultural and industrial importance of different plant groups in their daily life.	After completion of this course, students will be able to apply their knowledge of phycology, mycology, bryophytes pteridophytes and higher group of plants in further study and/or in the professional world of Agriculture, Biofertilizer and other industries.
2	Plant diversity (Practical)	1	BOT-MD-CC-1-1-P	1	25	• In plant diversity practical, students can learn to identify the plant groups. • They can study and dissect and female reproductive part of flower and their types. • They can gather the botanical knowledge of flowers and fruits.	Very basic instrument, like light microscope handling capabilities are developed. They are eligible to identify plant groups, their flower and fruit types.

3	Mushroom cultivation technology (Theory)	1	BOT-MD-SEC-1-TH	3	75	• After completion of this course students will get a detail idea about mushroom cultivation, its nutritional as well as medicinal importance. • They will have knowledge about research and workout with mushroom. • They are enriched with the cost-benefit ratio of mushroom cultivation. • Know about disease of mushroom as well as learn to identify the toxic and beneficial mushrooms.	Mushroom cultivation is now becoming a household culture. Nutritionally rich edible mushrooms are valuable in markets. Therefore mushroom cultivation itself can provide self-employment opportunity. They will learn about the working principal of different instruments like autoclave, hot air oven, laminar air flow weighing balance pH meter etc.
4	Mushroom cultivation technology (Practical)	1	BOT-MD-SEC-1-P	1	25	• After completion of the course students are able to cultivate mushroom by their own and sell these. • They can gather the knowledge of microbiological techniques. • They can learn to produce mushroom spawn, also can sell this.	Students will have knowledge of using instruments like **autoclave** and laminar air flow for sterilization purpose, **incubator** for maintaining culture. They can learn the basic microbiological techniques like media preparation, plugging, inoculation, sub culturing etc. Mushroom cultivation is now becoming a household culture. Nutritionally rich edible mushrooms are valuable in markets. Therefore mushroom cultivation itself can provide self-employment opportunity.
5	Plant systematic (Theory)	2	BOT-MD-CC-2-2-TH	3	75	Completion of this course will enable the students to know: • Plant taxonomy and different classification systems along with diagnostic characters of angiosperm families.	Students can apply their knowledge gathered on plant taxonomy and the gradual advancement of their characters to adopt in different environmental condition as well as in different era is useful to understand the evolution of plant kingdom and numerical and molecular taxonomy

					Course outcome	
6.	Plant systematic (Practical)	2	BOT-MD-CC-2-2-P	1	25	• On completion of this course, the students will be able to demonstrate a practical understanding of hierarchy of plants and able to represent each plant family by their floral formula and floral diagram. They can distinguish each angiosperm family by their diagnostic characters. • Students can learn to produce the herbarium sheet and field record on the basis of their field excursion.	The basic knowledge Knowledge on plant classification system will help them to get job in botanical survey or teaching plant taxonomy.
7.	Biostatistics (theory)	2	IDC-TH	3	75	• On completion of this course, the students can gather the knowledge of simple bio-statistical method and finding probabilities. • They can solve the mathematical problems of probability of occurrences of any incident.	Students have the knowledge of inheritance pattern or ratio, also understand the behaviour of gene during segregation.
8.	Biostatistics (practical)	2	IDC-P	1	25	• On completion of course they have knowledge of chi-squre value, goodness of fit. • They learn to understand mendelian genetics and inheritance pattern.	They are able to practise and analyse bio-statistical data. Interpret the data in graphical form. They are able to make bar graph, histogram.