AC/27.06.2023/RS1

SIES College of Arts, Science & Commerce (Autonomous)

RISE WITH EDUCATION

NAAC REACCREDITED - 'A' GRADE

SIES College of Arts, Science and Commerce (Autonomous)
Sion (West) Mumbai: 400022

Affiliated to Mumbai University

Syllabus under NEP effective from June 2023

Offered by: Department of Botany

Program: F. Y. B.Sc.

Course: Botany (SEC)

Choice Based Credit System (CBCS)

with effect from the academic year 2023-24

PROGRAMME SPECIFIC OUTCOMES (PSO'S)

After completing the graduation (B.Sc.) course in Botany, the learners would be able to -

PSO1: Identify the different groups of plants and gain the knowledge about plant biodiversity and its conservation.

PSO2: Learn different techniques, protocols, methodologies during study and apply them in future.

PSO3: Utilize the botanical knowledge for problem solving and for taking real time decisions while working with plants.

PSO4: Learn good laboratory practices and acquire research skills required for industrial support services.

PSO5: Inculcate scientific temperament, good reasoning power, technological and analytical skills while designing the experiments.

PSO6: Develop interest in pursuing higher studies in plant sciences and developbetter future.

PSO7: Understand the scope, current trends, job prospects and career avenues in Botany.

PSO8: Share social and environmental consciousness with the fellow citizens and motivate them towards taking fundamental steps towards environmental conservation.

SEC: BOTANY FYBSC SEMESTER – I & II (Credits: 2)			
SEC – Skill Enhancement Techniques in Plant Sciences			
Paper Code	**Paper Name**	**Credits**	**Practicals/week**
	Skill Enhancement Techniques in Plant Sciences	02	04

SEC – Skill Enhancement Techniques in Plant Sciences (Practical)		**Hr. 30** **Cr. 02**
Learning Objectives: The course entitled **Skill Enhancement Techniques in Plant Sciences** would be offered in Semester – I and/or Semester – II. It will highlight the advanced skills and techniques in plant sciences and would provide insight into the field of plant preservation, antimicrobial activity, mushroom cultivation, floral decorations and indoor gardening.		
Course Outcomes: After completion of the course, learners would be able to: **CO1**: Get hands-on training in wet and dry preservation methods of plants. **CO2**: Acquire and perform the technique of screening antibacterial and antifungal activities of plant extracts. **CO3**: Identify and comment upon the stages of mushroom cultivation. **CO4**: Apply the technique of mushroom cultivation for small scale production of oyster mushrooms. **CO5:** Create flower arrangements, vegetable & fruit carvings, bio-jewellery by acquiring botanical decoration skills. **CO6:** Create indoor gardens like dish gardens and terrariums. **CO7:** Process the fruits and vegetables to prepare plant products by becoming proficient in food preservation technology. **CO8:** Formulate herbal cosmetics. **CO9:** Develop entrepreneurial skills by arranging exhibition cum sale of plant products, herbal cosmetics, bio-jewellery, etc.		
1	Study of preservation of plants by wet and dry preservation techniques.	
2	Study of dry preservation of plants using herbarium preservation technique.	

3	Study of antibacterial activity of plant extracts	
4	Study of antifungal activity of plant extracts.	
5	Identification of stages in mushroom cultivation.	
6	Small – scale cultivation of Oyster mushroom.	
7	Preparation of floral arrangements: Indian, Japanese and Western	
8	Preparation of Jams, Jellies, Pickle and Syrup.	
9	Preparation of herbal Products: Herbal Face Pack, Bath Oil, Herbal Shampoo, Herbal Lip Balm, Rose water, Floral Incense, and Kajal.	
10	Preparation of indoor gardens: Dish Garden, Bottle Garden and Terrarium.	
11	Preparation of Biojewellery (Resin art), and Bio-gifts.	
12	Preparation of Botanical decoration: Vegetable and Fruit carving.	

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