Yashwantrao Chavan College of Science, Karad Department of Botany

2024-25 COURSE OUTCOMES

	Paper IX: DSE-E 25 REPRODUCTIVE BIOLOGY OF
B. Sc. III (Semester V)	ANGIOSPERMS
	CO41. Recognize morphology of reproductive organs and development in the
	reproduction of angiosperms.
	CO42. Understand Pollination and Fertilization mechanism in plants
	CO43. Explore the organization of Embryo and Endosperm development in
	plants.
B. Sc. III (Semester V)	Paper X: DSE-E 26 PLANT METABOLISM AND STRESS BIOLOGY
	CO44 Understand plant water relationship and mechanism of transpiration.
	CO45 Explore the mechanism of mineral nutrient uptake in plants.
	CO46 Explain biotic and abiotic factors responsible for plant stress.
B. Sc. III (Semester V)	Paper XI: DSE-E 27 PLANT BIOTECHNOLOGY
	CO47. Explain applications of Plant biotechnology
	CO48. Describe Plant Tissue Culture techniques and Genetic Engineering.
	CO49. Explain transgenic plants and method of gene transfer.
B. Sc. III (Semester V)	Paper XII: DSE-E 28 HORTICULTURE
	CO50. Understand divisions and important Horticulture practices
	CO51. Explore floriculture techniques and fruit preservation technology.
	CO52. Learn management and conservation of horticultural.



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COURSE OUTCOMES

	Paper XIII: DSE-F 25 PLANT BIOCHEMISTRY AND RESEARCH
B. Sc. III	METHODOLOGY
(Semester	CO53. Explain classification, structure, isomerism and significance of
VI)	carbohydrates.
	CO54. Describe structure, properties, significance of lipids in plant cell.
	CO55. Learn type of research and methodology
	Paper XIV: DSE-F 26 NATURAL RESOURCE MANAGEMENT AND
B. Sc. III	HERBAL TECHNOLOGY
(Semester	CO56. Learn management of natural resources and utilization.
VI)	CO57. Understand sources of herbal medicines, identification, extraction,
	isolation and purification of herbal medicines.
	CO58. Explain application of herbal cosmetics.
	Paper XV: DSE - DSE-F 27 PLANT DIVERSITY AND
B. Sc. III	ETHNOBOTANY
(Semester	CO59 Understand value of plant diversity
VI)	CO60 Learn to conserve methods of plant diversity conservation
	Paper XVI: DSE-F 28 PLANT BREEDING, BIOINFORMATICS AND
B. Sc. III	BIOSTATISTICS
(Semester	CO62. Learn methods of plant breeding
VI)	CO63 Describe Bioinformatics and tools, Information technology, History
	and tools of IT.
	CO64 Explain Biostatistics terminology, Data presentation and measures of
	central tendency.



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COURSE OUTCOMES

B. Sc. III	Practical-I (Based on Paper No. IX and XIV)
Practical-I	CO65 Study of flower, anther, pollen germination, pollen viability, embryo,
	ovule and endopserms in angiosperms.
	CO66 Estimation of carbonates, bicarbonates, BOD, COD, DO of water.
	CO67 Study of major and minor forest products, herbal preparations and
	adultrations.
	CO68 Analysis of Carbon sequestration, satellite images.
B. Sc. III	Practical-II (Based on Paper No. X and XIII)
Practical-II	CO69 Study of plant water relations, deficiency symptoms in plants
	CO70 Estimation of proline, polyphenols from plant material.
	CO71 Carry out qualitative tests for sugar, starch, cellulose, protein and
	lipids.
	CO72 Study of micrometry, photomicrography techniques and camera lucida
	technique.
B. Sc. III	Practical-III (Based on Paper No. XII and XIII)
Practical-III	CO73 Study of horticultural techniques like budding, layering, grafting
	CO74 Study of ornamental plants like indoor, outdoor, hedge, edge plants
	CO75 Qualitative tests for sugar, protein, lipid, starch, cellulose in plants
	CO76 Separation techniques like TLC, Paper chromatography
B. Sc. III	Practical-IV (Based on Paper No. XI and XVI)
Practical-IV	CO77 Study of tissue culture, callus culture, protoplast isolation.
	CO78 Study of golden rice genetics, plant breeding techniques.
	CO79 Study hybridization techniques in crops.
	CO80 Study of biostatistics, NCBI database and protein structure.



Head
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