

Department of Botany

BSc(General) Major Botany

Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor				OE	VC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total	Exit Credit	Final Total Credits
				Microbiology	Zoology	Chemistry	Physics							
4.5	I	2 Cr-T: Micro to macro –decoding phytodiversity 2 Cr-P:Botany Major Practical 1 2 Cr-T: Fundamentals of Plant Morphology		---				2 Cr-T: Basic Skill in Gardening and Nursery Management 2 Cr-P: Basic Skill in Gardening and Nursery Management	2 Cr-T: Techniques in Landscape Designing – SEC 2 Cr-P :Techniques in Landscape Designing - SEC	2 Cr T EVS - VEC 2 Cr AEC Indian Traditional System of medicine and IPR (2C)- IKS	2 Cr-T: Online course based on Yoga - CC	22 C		22
4.5	II	2 Cr-T: Fundamental of Plant Anatomy 2 Cr-T: Biology of cell and molecule 2 Cr-P: Botany Major Practical 2		2 Cr-T: Introduction to Microbiology	2 Cr-T: Food, Nutrition and Health	2 Cr-T: Fundamental Biochemistry	2Cr-T: Calibration Techniques/ Instrumentation for agriculture	2 Cr-T: Best Practices in Biodiversity conservation 2 Cr-P: Best Practices in Biodiversity conservation	2 Cr-T:+P Analytical Techniques in plant science - SEC 2 Cr-T:+P Basics of Hydroponics - VSC	2Cr T: Technical English, VEC (2C)	2 Cr-T: Physical Education/ Cultural activities/ NSS/ NCC/ Fine/ Applied/ Visual/ Performing Arts Course -	22 C	4	22
Cumulative		12		2				8	8	10	4	44	4	48
Certificate on Exit + 4 credit Bridge Course														

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				Microbiology	Zoology	Chemistry	Physics							
5	III	2 Cr-T: Plant Ecology and Soil Fertility 2 Cr-T: Developmental Biology 4 Cr-P: Botany Major Practical 3 (P)		2 Cr-T: Growth and cultivation of bacteria 2 Cr-P: Practical on Growth and cultivation of bacteria	2 Cr-T: Applied Zoology 2Cr-P: Applied Zoology	4Cr-T:Chemistry of life	2Cr-T: Basic Telecommunication 2Cr-P:Fun with Mechanics	2 Cr-T: Skills in Competitive exam – forest service	2 Cr-T: Mushroom Cultivation SEC	Language-English/Marathi- I (2C) – AEC	2 Cr-T: Nanobiology 2 Cr-T: Field Visit /Institutional or visits/study tour - CC	22 C		22
5	IV	2 Cr-T:Angiosperm systematics 2 Cr-T: Plant Embryology 2 Cr-P:Botany Major Practical 4		2 Cr-T: Industrial Microbiology 2 Cr-P: Industrial Microbiology	2Cr-T:Toxicology 2Cr-P:Toxicology	4Cr-T:Chemistry of Materials	2Cr-T:Fiber Optic Communication 2Cr-P:Basic Optics	2 Cr-T:Advances in Floriculture	2 Cr-T: Herbal Medicine - SEC	2 Cr-T: - VEC Environmental Awareness	2 Cr-T: Computer applications – CC 2 Cr-T: Project - CEP	22 C	4	24
Cumulative		28		10				12	12	14	12			88
Diploma on Exit + 4 credits of NSQF and Internship														

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				Microbiology	Zoology	Chemistry	Physics							
5.5	V	2 Cr-T: Plant Physiology and Biochemistry 2 Cr-T: Mycology and plant pathology 2 Cr-T: Genetics and Plant Breeding 2 Cr-T: Natural Resource Management 2 Cr-P: Botany Major Practical 5	2 Cr-T: Basics of Phytochemistry 2 Cr-P: Basics of Phytochemistry)	2 Cr-T: Medical Microbiology and immunology 2 Cr-P: Practical based on Medical Microbiology and immunology	2Cr-T: Biodiversity, Conservation and sustainable development 2Cr-P: Biodiversity, Conservation and sustainable development	2Cr-P: Laboratory Safety 2Cr-T: IPR and Chemoinformatics	2Cr-T: Lasers and its Applications 2Cr-P: Optoelectronics/ Photonics		2 Cr-T: Applications of Bioinformatics - SEC / 2 Cr-T: Seed Technology - SEC		2 Cr-T: Efforts for conservation of any one plant species	22C		

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				Microbiology	Zoology	Chemistry	Physics							
5.5	VI	2 Cr-T: Palynology and Paleobotany 2 Cr-T: Introductory Agroforestry 2 Cr-T: Plant –Animal interactions 2 Cr-T: Plant Biotechnology and Stress Biology 2 Cr-P: Botany Major Practical 6	2 Cr-T: Bioethics and Biostatistics 2 Cr-P: Bioethics and Biostatistics	Nanobiotechnology (2C)(Th) Practicals based on nanobiotechnology(2C)(Pr)	2Cr-T: Environmental Monitoring and Management 2Cr-P: Environmental Monitoring and Management	2Cr-T: Instrumental methods of analysis 2Cr-P: Analytical Chemistry Practical Course	2Cr-T: Acoustics 2Cr-P: Radiation Physics				4 Cr-T: Assessment of Biodiversity	22		
Cumulative		48		18								44		140
Award of Degree														