

BACHELOR OF SCIENCE (HONORS) BOTANY

**Programme Code: BOB
Duration: 3 Years**

SESSION: 2019-2020



Programme Scheme

Faculty of Life and Basic Sciences

**CHHATRAPATI SHIVAJI MAHARAJ
UNIVERSITY PANVEL, NAVI MUMB**

Teaching & Evaluation Scheme SEMESTER I

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC101	Microbiology and Phycology	4	0	0	30	70	100	4
DSC	BOBC102	Biomolecules and Cell Biology	4	0	0	30	70	100	4
GE	**G101	Generic Elective - I	4	0/1	4/0	30	70	100	4
AECC		English Communication	2	0	0	15	35	50	2
DSC	BOBC191	Algae and Microbiology Lab	0	0	4	15	35	50	2
DSC	BOBC192	Biomolecules and Cell Biology Lab	0	0	4	15	35	50	2
GE	**G191	Generic Elective – I Lab	0	0	4	15	35	50	2
		Total	14	0	12	150	350	500	20

SEMESTER II

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC201	Diversity of Archaeogoniates&Plant Anatomy	4	0	0	30	70	100	4
DSC	BOBC202	Plant physiology and Ecology	4	0	0	30	70	100	4
GE	**G201	Generic Elective - II	4	0/1	4/0	30	70	100	4
AECC	AEC201T	Environmental Science	2	0	0	15	35	50	2
DSC	BOBC291	Diversity of Archaeogoniates&Plant Anatomy lab	0	0	4	15	35	50	2
DSC	BOBC292	Plant Physiology and Ecology Lab	0	0	4	15	35	50	2
GE	**G291	Generic Elective – II Lab	0	0	4	15	35	50	2
		Total	14	0	12	150	350	500	20

SEMESTER III

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC301	Anatomy of Angiosperms	4	0	0	30	70	100	4
DSC	BOBC302	Economic botany	4	0	0	30	70	100	4
DSC	BOBC303	Reproductive biology	4	0	0	30	70	100	4
GE	**G301	Generic Elective - II	4	0/1	4/0	30	70	100	4
SEC	BOBS301	Skill enhancement I	2	0	0	15	35	50	2
DSC	BOBC391	Morphology and anatomy	0	0	4	15	35	50	2
DSC	BOBC392	Economic botany	0	0	4	15	35	50	2
DSC	BOBC393	Reproductive biology	0	0	4	15	35	50	2
GE	**G391	Generic Elective – II	0	0	4	15	35	50	2
		Total	14	0	12	150	350	500	20

SEMESTER IV

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC401	Molecular biology	4	0	0	30	70	100	4
DSC	BOBC402	Phytogeography	4	0	0	30	70	100	4
DSC	BOBC403	Plant systematics	4	0	0	30	70	100	4
GE	**G401	Generic Elective - II	4	0/1	4/0	30	70	100	4
SEC	BOBS402	Skill enhancement course 2	2	0	0	15	35	50	2
DSC	BOBC491	Molecular biology lab	0	0	4	15	35	50	2
DSC	BOBC492	Phytogeography lab	0	0	4	15	35	50	2
DSC	BOBC493	Plant systematics lab	0	0	4	15	35	50	2
GE	**G401	Generic Elective – II lab	0	0	4	15	35	50	2
		Total	14	0	12	150	350	500	24

SEMESTER V

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC501	Principles of genetics	4	0	0	30	70	100	4
DSC	BOBC502	General microbiology	4	0	0	30	70	100	4
DSE	BOBE501	Discipline specific elective 1	4	0/1	4/0	30	70	100	4
DSE	BOBE502	Discipline specific elective 2	2	0	0	15	35	50	2
DSC	BOBC591	Principles of genetics	0	0	4	15	35	50	2
DSC	BOBC592	General Micrology	0	0	4	15	35	50	2
DSE	BOBE591	Discipline specific elective 1	0	0	4	15	35	50	2
DSE	BOBE592	Discipline specific elective 2							
		Total	14	0	12	150	350	500	20

SEMESTER VI

Course Type	Course Code		L	T	P	IA	UE	Total Marks	Credits
DSC	BOBC601	Plant metabolism	4	0	0	30	70	100	4
DSC	BOBC602	Plant biotechnology	4	0	0	30	70	100	4
DSE	BOBE601	Discipline specific elective 3	4	0/1	4/0	30	70	100	4
DSE	BOBE602	Discipline specific elective 4	2	0	0	15	35	50	2
DSC	BOBC691	Plant metabolism lab	0	0	4	15	35	50	2
DSC	BOBC692	Plant biotechnology lab	0	0	4	15	35	50	2
DSE	BOBE 691	Discipline specific elective 3 lab	0	0	4	15	35	50	2
DSE	BOBE692	Discipline specific elective 4 lab							
		Total	14	0	12	150	350	500	20

List of Generic Electives offered by Department of Botany for Other Department Students

Semester	Course Code	Generic Electives	(L-T-P)	Credits
I	Generic elective 1	Microbiology and Phycology	4-0-4	6
I		Biomolecules and Cell Biology	4-0-4	6
II	Generic elective 2	Diversity of Archaeogoniates&Plant Anatomy	4-0-4	6
II		Plant physiology and Ecology	4-0-4	6
III	Generic elective 3	Anatomy of Angiosperms	4-0-4	6
III		Economic botany	4-0-4	6
III		Reproductive biology	4-0-4	6
IV	Generic elective 4	Molecular biology	4-0-4	6
IV		Phytogeography	4-0-4	6
IV		Plant systematics	4-0-4	6

Ability Enhancement Compulsory Courses (AECC)

Semester	Offering Department	Course Code (T+P)	Course Name	(L-T-P)	Credits
I	English	ENBC101	English Communication	2-0-0	2
II	Basic Sciences	ESBC201	Environmental Studies	2-0-0	6

List of Department-Specific Electives (DSE-1 to DSE-4) offered by Department for students in

Semester	Course Code (T+P)	Course Name	(L-T-P)	Credits
V	BOBE501+BOBE591	Analytical Techniques In Plant Sciences	4-0-2	6
V	BOBE502+BOBE592	Bioinformatics	4-0-2	6
V	BOBE503+BOBE593	Stress biology	4-0-2	6
VI	BOBE601+BOBE691	Plant breeding	4-0-2	6
VI	BOBE602+BOBE692	Natural resource management	4-0-2	6
VI	BIBEC603+BOBE693	Horticultural Practices	4-0-2	6

B.Sc. (Hons.) (4 to be selected, 2 in each of 5th and 6th semester)

List of Generic Electives Available for students of B.Sc. (Hons.) Botany

Semester	Offering Department	Course Code (T+P)	Course Name	(L-T-P)	Credits
I	Chemistry		Inorganic Chemistry I	4-0-2	6
II	Chemistry		Organic Chemistry I	4—0-2	6
III	Chemistry		Organic Chemistry II	4-0-2	6
IV	Chemistry		Inorganic Chemistry II	4-0-2	6
I	Biotechnology		Biochemistry & Metabolism	4-0-2	6
II	Biotechnology		Immunology	4—0-2	6
III	Biotechnology		Molecular Biology	4-0-2	6
IV	biotechnology		Bioanalytical tools	4-0-2	6
I	Zoology		Non-Chordates	4-0-2	6
II	Zoology		chordates	4—0-2	6

III	Zoology		Animal Physiology: Controlling and coordinating system	4-0-2	6
IV	Zoology		Biochemistry Of Metabolic Processes	4-0-2	6
I	Biochemistry		Biomolecules	4-0-2	6
II	Biochemistry		Enzymes	4—0-2	6
III	Biochemistry		Membrane Biology and Bioenergetics	4-0-2	6
IV	Biochemistry		Gene organization, replication and repair	4-0-2	6
I	Bioinformatics		Biomolecules and cell biology	4-0-2	6
II	Bioinformatics		Introduction to bioinformatics	4—0-2	6
III	Bioinformatics		Structural bioinformatics	4-0-2	6
IV	Bioinformatics		Chemiinformatics	4-0-2	6

List of Skill Enhancement Course (SEC-1 & SEC-2) offered by Department (Any 2 to be selected)

Semester	Course Code	Course Name	(L-T-P)	Credits
III	BOBS301+BOBS391	Biofertilizers	4-0-0	4
III	BOBS302+BOBS392	Herbal technology	4-0-0	4
III	BOBS303+BOBS393	Nursery & Gardening	4-0-0	4
IV	BOBS401+BOBS491	Floriculture	4-0-0	4
IV	BOBS402+BOBS492	Medicinal botany	4-0-0	4
IV	BOBS403+BOBS493	Forensic botany	4-0-0	4

Department Specific Course (DSC), Department Specific Elective (DSE), Generic Elective Course (GE), Skill Enhancement Course (SEC), Ability Enhancement Core Course (AECC)