

Workload 2025-2026

Name of Faculty	Workload
Mr S.G.Kulkarni (Biochemistry)	20 Hrs.(T+P)
Ms.V.N.More (Microbiology)	20 Hrs.(T+P)
Ms.V.N.Arekar (Biotechnology)	20 Hrs.(T+P)
Ms. T.S.Vagavekar (Microbiology)	20 Hrs.(T+P)
Ms.A.S.Kale (Biochemistry)	20 Hrs.(T+P)
Ms,P.C.Wakrekar (Biotechnology)	20 Hrs.(T+P)
Ms.S.S.Kakade (Biochemistry)	20 Hrs.(T+P)
Total Workload	140 Hrs. (7 Full time staff)

B.Sc. Biotechnology entire- Semester- I & II

Clas s	Verticals NEP	No of Students	No of Batches	Semester	Course Titles	Cre dits	Theory Workload	Practical Workload	Total Workload
B.sc I	DSC-I	66	1	Sem 1	Biotechnology-I (Biotechnology for human welfare-I)	2	6x2= 12		
B.sc I	DSC-II		1	Sem 1	Biotechnology-II (Biochemistry-I)	2			
B.sc I	MIN-I		1	Sem 1	Microbiology-I (Introduction to Microbial world)	2			
B.sc I	MIN-II		1	Sem 1	Microbiology II Techniques in Microbiology	2			
B.sc I	OEC-I		1	Sem 1	Bioinstrumentation I	2			
B.sc I	OEC-II		1	Sem 1	(Plant Sciences)	2			
B.sc I	AEC-I		1	Sem 1	Business Communication-I	2			
B.sc I	IKS-I		1	Sem 1	Indian Knowledge System	2			
B.sc I	DSC-PR-I		3	Sem 1	Techniques in Biochemistry	2		12	
B.sc I	MIN-PR-I		3	Sem 1	Lab exercises in Microbiology	2		12	
B.sc I	OEC-PR-I		3	Sem 1	Techniques in Bioinstrumentation	2		12	
Semester –I Total						22	12	36	

B.Sc. Biotechnology entire Semester- II

Class s	Verticals NEP	No of Students	No of Batches	Semester	Course Titles	Cre dits	Theory Workload	Practical Workload	Total Workload
B.sc I	DSC-III	66	1	Sem 2	Biotechnology -III (Biotechnology for human welfare-II)	2	6x2=12		
B.sc I	DSC-IV		1	Sem 2	Biotechnology-IV (Biochemistry-II)	2			
B.sc I	MIN-III		1	Sem 2	Microbiology-III (Bacterial Cytology and Cultivation)	2			
B.sc I	MIN-IV		1	Sem 2	Microbiology-IV (Virology)	2			
B.sc I	OEC-III		1	Sem 2	(Ecology)	2			
B.sc I	OEC-IV		1	Sem 2	(Animal Sciences)	2			
B.sc I	AEC-II		1	Sem 2	Business Communication-II	2			
B.sc I	VSC PR-I		3	Sem 2	Basics in Cell biology	2		12	
B.sc I	DSC PR-II		3	Sem 2	Techniques in Biotechnology	2		12	
B.sc I	MIN-PR-II		3	Sem 2	Techniques in Bacterial Cytology Virology-	2		12	
B.sc I	OEC-PR-II		3	Sem 2	Techniques in Plant &Animal Sciences	2		12	
Semester – II Total						22	12	48	

B.Sc. Biotechnology entire- Semester- III & IV

Class	Vertical s NEP	No of Students	No of Batches	Semeste r	Course Titles	Cr edi ts	Theory Workload	Practical Workload	Total Workload
B.sc II	DSC-V	62	1	Sem 3	Molecular Biology-I	2	4x2=8		
B.sc II	DSC-VI		1	Sem 3	Metabolic Pathways - I	2			
B.sc II	MIN-V		1	Sem 3	Microbial Genetics	2			
B.sc II	MIN-VI		1	Sem 3	Environmental Microbiology	2			
B.sc II	VSC PR - II		3	Sem 3	Techniques in Genetics	2	-----	4x2=8	
B.sc II	AEC-III		1	Sem 3	Communication Skills-I	2	----		
B.sc II	VEC-I		1	Sem 3	Democracy, Election and Good Governance (DEGG)	2	-----		
B.sc II	VEC-II		2	Sem 3	Environmental Studies	2	-----		
B.sc II	DSC PR- III		3	Sem 3	Techniques in Molecular Biology	4	-----	8x2=16	
B.sc II	MIN PR- III		3	Sem 3	Techniques in Environmental Microbiology	2	-----	4x2=8	
SEM-III Total Semester – III Total						22	8	32	40

B.Sc. Biotechnology entire Semester - IV

Class	Verticals NEP	No of Students	No of Batches	Semester	Course Titles	Credits	Theory Workload	Practical Workload	Total Workload
B.sc II	DSC-VII	62	1	Sem 4	Molecular Biology - II	2	4x2=8		
B.sc II	DSC-VIII		1	Sem 4	Metabolic Pathways-II	2			
B.sc II	MIN-VII		1	Sem 4	Immunology	2			
B.sc II	MIN-VIII		1	Sem 4	Advances in Cell Biology	2			
B.sc II	VSC-PR-III		3	Sem 4	Basics in Forensic Sciences	2		4x2=8	
B.sc II	AEC-IV		1	Sem 4	Communication Skills-II	2			
B.sc II	VEC-III		1	Sem 4	Environmental Studies	2			
B.sc II	CC		3	Sem 4	C0-Curricular Courses	2			
B.sc II	DSC PR-IV		3	Sem 4	Techniques in Metabolic Pathways	2		8x2=16	
B.sc II	MIN-PR-IV		3	Sem 4	Techniques in Immunology	4		4x2=8	
Semester – IV Total						22	8	32	40

Course Titles to be implemented from 2025-2026
B.Sc. Biotechnology entire - Semester- V & VI

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
Semester-V										
1	DSC-IX	DSC07BTE51	Basics in Genetic Engineering	2	-	40	10	-	50	2
2	DSC-X	DSC07BTE52	Industrial Biotechnology	2	-	40	10	-	50	2
3	DSC-XI	DSC07BTE53	Enzymology	2	-	40	10	-	50	2
4	DSC-XII	DSC07BTE54	Research Methodology in Biotechnology	2	-	40	10	-	50	2
5	DSE-I	DSE07BTE51	Animal Tissue Culture	2	-	40	10	-	50	2
6	VSC-PR-IV	VSC07BTE59	Techniques in Enzymology	-	4	-	-	25	25	2
7	FP	FPR07BTE51	Field Project	-	-	-	-	50	50	2
8	DSC-PR-V	DSC07BTE59	Techniques in Genetic Engineering & Industrial Biotechnology	-	16	-	-	100	100	8
Semester –V Total				10	20	200	50	175	425	22
Semester-VI										

1	DSC-XIII	DSC07BTE61	Advances in Genetic Engineering	2	-	40	10	-	50	2
2	DSC-XIV	DSC07BTE62	Application of Biotechnology in Agriculture	2	-	40	10	-	50	2
3	DSC-XV	DSC07BTE63	Biosafety Bioethics, and IPR	2	-	40	10	-	50	2
4	DSC-XVI	DSC07BTE64	Bioinformatics	2	-	40	10	-	50	2
5	DSE-II	DSE07BTE61	Plant Tissue Culture	2	-	40	10	-	50	2
6	VSC-PR-V	VSC07BTE69	Techniques in Plant Tissue Culture	-	4	-	-	25	25	2
7	OJT	OJT07BTE61	OJT	-	-	-	-	50	50	2
8	DSC-PR-VI	DSC07BTE69	Techniques in Agriculture & Bioinformatics	-	16	-	-	100	100	8
Semester –VI- Total				10	20	200	50	175	425	22
Cumulative Total (3rd Year)				20	40	400	100	350	850	44
Three Year UG Degree in B.Sc. Biotechnology Entire								2650	132	