

# Vivekanand College, Kolhapur (Empowered Autonomous)

## Department of Biotechnology

### Departmental Teaching and Evaluation Scheme

#### Two - Years PG Programme

(As per NEP-2020 Guidelines)

### Biotechnology

#### M. Sc. I: Semester-I & II

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
<b>Semester-I</b>										
1	DSC-I	DSC21MBT11	Biological Chemistry	4	-	80	20	-	100	4
2	DSC-II	DSC21MBT12	Microbial technology	4	-	80	20	-	100	4
3	DSE-I	DSE21MBT11	Environmental Biotechnology and Ecology	4	-	80	20	-	100	4
		DSE21MBT12	Genetics and Basic Cell Biology							
4	RMD	RMD21MBT11	Research Methodology	4	-	80	20	-	100	4
5	DSC-PR-I	DSC21MBT19	Biotechnology Lab-I	-	12	-	-	150	150	6
<b>Semester-I Total</b>				<b>16</b>	<b>12</b>	<b>320</b>	<b>80</b>	<b>150</b>	<b>550</b>	<b>22</b>
<b>Semester-II</b>										
1	DSC-III	DSC21MBT21	Molecular Biology	4	-	80	20	-	100	4
2	DSC-IV	DSC21MBT22	Enzyme Technology	4	-	80	20	-	100	4
3	DSE-II	DSE21MBT21	Virology	4	-	80	20	-	100	4
		DSE21MBT22	Immunology							
4	DSC-PR-II	DSC21MBT29	Biotechnology Lab-II	-	12	-	-	150	150	6
5	FPR/OJT	FPR21MBT21	Field Project	-	4	-	-	-	100	4
		OJT21MBT21	On Job Training							
<b>Semester-II Total</b>				<b>12</b>	<b>16</b>	<b>240</b>	<b>60</b>	<b>100</b>	<b>550</b>	<b>22</b>
<b>Total (Sem. I &amp; II)</b>				<b>28</b>	<b>28</b>	<b>560</b>	<b>140</b>	<b>250</b>	<b>1100</b>	<b>44</b>

**Biotechnology**  
**M. Sc. II: Semester-III & IV**

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
<b>Semester-III</b>										
1	DSC-V	DSC21MBT31	Advances in Gene Technology	4	-	80	20	-	100	4
2	DSC-VI	DSC21MBT32	Bioprocess Engineering	4	-	80	20	-	100	4
3	DSE-III	DSE21MBT31	Plant Biotechnology	4	-	80	20	-	100	4
		DSE21MBT32	Developmental Biology							
4	DSC-PR-III	DSC21MBT39	Biotechnology Lab-III	-	12	-	-	150	150	6
5	RPR-I	RPR21MBT31	Research Project	-	4	-	-	-	100	4
<b>Semester-III Total</b>				<b>12</b>	<b>16</b>	<b>240</b>	<b>60</b>	<b>150</b>	<b>550</b>	<b>22</b>
<b>Semester-IV</b>										
1	DSC-VII	DSC21MBT41	Bioinformatics	4	-	80	20	-	100	4
2	DSC-VIII	DSC21MBT42	Molecular Cell Biology	4	-	80	20	-	100	4
3	DSC-IX	DSC21MBT43	Bioethics, Biosafety and IPR	4	-	80	20	-	100	4
4	DSE-IV	DSE21MBT41	Animal Biotechnology	4	-	80	20	-	100	4
		DSE21MBT42	Biostatistics							
5	RPR-II	RPR21MBT41	Research Project	-	6	-	-	-	150	6
<b>Semester-IV Total</b>				<b>12</b>	<b>10</b>	<b>240</b>	<b>60</b>	<b>100</b>	<b>550</b>	<b>22</b>
<b>Total (Sem. III &amp; IV)</b>				<b>24</b>	<b>26</b>	<b>480</b>	<b>120</b>	<b>250</b>	<b>1100</b>	<b>44</b>

Abbreviations: TH-Theory, PR-Practical, PRO- Project, ESE- End Semester Examination, CIE-Continuous Internal Examination

Note:

1. Passing percentage will be 40%
2. Separate passing for each Head - ESE, CIE and Practicals