

**SCHEME OF EXAMINATION**

Subject Code	Subject	Hours of Instruction	Exam Duration	Maximum Marks			Credit Points
				CA	CE	Total	
<b>FIRST SEMESTER</b>							
<b>Part A</b>							
18PMBM101	Core I: Fundamentals of Microbiology and Taxonomy	5	3	25	75	100	5
18PMBM102	Core II: Microbial Biochemistry and Physiology	5	3	25	75	100	5
18PMBM103	Core III: Microbial Genetics	5	3	25	75	100	5
18PMBM104	Core IV: Immunology	5	3	25	75	100	5
18PMBM105	Core V: Bioinstrumentation	4	3	25	75	100	4
18PMBMP101	Core Practical I: Fundamentals of Microbiology & Taxonomy, Microbial Biochemistry & Physiology, Microbial Genetics, Immunology & Bioinstrumentation	5	9	40	60	100	4
<b>Non Credit</b>							
18PLS101	Career Competency Skills I	1	-	-	-	-	-
	<b>Total</b>	<b>30</b>				<b>600</b>	<b>28</b>
<b>SECOND SEMESTER</b>							
<b>Part A</b>							
18PMBM201	Core VI: Soil and Agricultural Microbiology	5	3	25	75	100	5
18PMBM202	Core VII: Medical Microbiology	5	3	25	75	100	5
18PMBEL201	Elective I	5	3	25	75	100	4
18PMBMP201	Core Practical II: Soil and Agricultural Microbiology, Medical Microbiology, Environmental	6	9	40	60	100	4

	Microbiology and Cell biology						
<b>Optional Subjects</b>							
18PBCMBI201	IDC I: Diagnostic Biochemistry	3	3	25	75	100	2
18PBCMBIP201	IDC Practical I: Diagnostic Biochemistry	3	3	40	60	100	2
18PBTMBI201	IDC I: Plant Tissue Culture Technology	3	3	25	75	100	2
18PBTMBIP201	IDC Practical I: Plant Tissue Culture Technology	3	3	40	60	100	2
<b>Part B</b>							
18PVE201	Value Education : Human Rights	2	3	25	75	100	2
<b>Non Credit</b>							
18PLS201	Career Competency Skills II	1	-	-	-	-	-
	<b>Total</b>	<b>30</b>				<b>700</b>	<b>24</b>
<b>THIRD SEMESTER</b>							
<b>Part A</b>							
18PMBM301	Core VIII: Genetic Engineering	6	3	25	75	100	5
18PMBM302	Core IX: Biostatistics and Research Methodology	5	3	25	75	100	4
18PMBEL301	Elective II	5	3	25	75	100	5
18PMBMP301	Core Practical III: Genetic Engineering, Industrial Microbiology, and Food and Dairy Microbiology	6	9	40	60	100	3
18PMBMP302	Core Practical IV: Statistical Software	2	3	40	60	100	2
<b>Optional Subjects</b>							
18PBCMBI301	IDC II: Pharmaceutical Biochemistry	3	3	25	75	100	2
18PBCMBIP301	IDC Practical II: Pharmaceutical	3	3	40	60	100	2

M.Sc., Applied Microbiology (Students admitted from 2018-2019 onwards)

	Biochemistry						
18PBTMBI301	IDC II: Animal Tissue Culture Technology	3	3	25	75	100	2
18PBTMBIP301	IDC Practical II: : Animal Tissue Culture Technology	3	3	40	60	100	2
<b>Part B</b>							
	<b>Total</b>	<b>30</b>				<b>700</b>	<b>23</b>
<b>FOURTH SEMESTER</b>							
<b>Part A</b>							
18PMBM401	Core X: Industrial Microbiology	5	3	25	75	100	4
18PMBM402	Core XI: Food and Dairy Microbiology	5	3	25	75	100	5
18PMBPR401	Project and Viva Voce	5	-	50	150	200	6
	<b>Total</b>	<b>15</b>				<b>400</b>	<b>15</b>
<b>Grand Total</b>						<b>2400</b>	<b>90</b>

## ELECTIVE

The students shall choose any one of the following subjects as Elective I and II in the Second and Third semesters respectively.

### Elective I

S.No.	SEMESTER	SUBJECT CODE	SUBJECT
1.	II	18PMBEL201	Elective I: Environmental Microbiology
		18PMBEL202	Elective I: Cell Biology

### Elective II

S.No.	SEMESTER	SUBJECT CODE	SUBJECT
1.	III	18PMBEL301	Elective II: Bioinformatics, Bioethics and IPR
		18PMBEL302	Elective II: Pharmaceutical Microbiology

## FOR COURSE COMPLETION

- Student shall complete:
- Value Education: Human Rights in II semester.
- IDC in II and III semester.
- Elective subjects in II and III semesters.
- Project & Viva-Voce in IV semester.
- Career Competency Skills in I and II semester.

## TOTAL MARKS AND CREDIT DISTRIBUTION

S.No.	COMPONENT	MARK	CREDITS
1.	PART A: Core, Elective and IDC subjects	2300	88
2.	PART B: Value Education	100	02
<b>TOTAL</b>		<b>2400</b>	<b>90</b>