



**GULBARGA UNIVERSITY**  
**DEPARTMENT OF STUDIES IN MICROBIOLOGY**  
**M.SC. DEGREE (SEMESTER) COURSE UNDER CBCS SCHEME**  
**SCHEME OF TEACHING AND EXAMINATION**  
**(EFFECTIVE FROM THE ACADEMIC YEAR 2011-12 AND ONWARDS)**

PAPER	Teaching		Examination		Internal Assmnt	Credits
	Hours/week	Hours	Marks	Hours		
<b><u>I SEMESTER:</u></b>						
1.1 HC Fundamentals of Microbiology	4	3	80	20		4
1.2 HC Microbial Biochemistry & Enzymology	4	3	80	20		4
1.3 HC Bacteriology	4	3	80	20		4
1.4 SC Virology and Mycology/ OR Phycology & Protozoology	4	3	80	20		4
1.5 Practical Based on paper 1.1	4	3	40	10		2
1.6 Practical Based on paper 1.2	4	3	40	10		2
1.7 Practical Based on paper 1.3	4	3	40	10		2
1.8 Practical Based on paper 1.4	4	3	40	10		2
<b><u>II SEMESTER:</u></b>						
2.1 HC Microbial Physiology & Metabolism	4	3	80	20		4
2.2 HC Microbial Genetics	4	3	80	20		4
2.3 SC Microbial Ecology & Environmental Microbiology OR Microbial Ecology & Diversity	4	3	80	20		4
2.4 OE Microbial Safety & Quality Control	4	3	80	20		4
2.5 Practical Based on paper 2.1	4	3	40	10		2
2.6 Practical Based on paper 2.2	4	3	40	10		2
2.7 Practical Based on paper 2.3	4	3	40	10		2
2.8 Practical Based on paper 2.4	4	3	40	10		2
<b><u>III SEMESTER:</u></b>						
3.1 HC Molecular Biology & Genetic Engineering	4	3	80	20		4
3.2 HC Food & Dairy Microbiology	4	3	80	20		4
3.3 SC Immunology & Immunotechniques / OR Pharmaceutical Microbiology	4	3	80	20		4
3.4 OE Microbial Technology & Entrepreneurship	4	3	80	20		4
3.5 Practical Based on paper 3.1	4	3	40	10		2
3.6 Practical Based on paper 3.2	4	3	40	10		2
3.7 Practical Based on paper 3.3	4	3	40	10		2
3.8 Practical Based on paper 3.4	4	3	40	10		2
<b><u>IV SEMESTER:</u></b>						
4.1 HC Medical & Diagnostic Microbiology	4	3	80	20		4
4.2 HC Bioprocess Engineering & Fermentation Technology	4	3	80	20		4
4.3 HC Project – Dissertation	4	3	100	--		4
4.4 SC Agricultural Microbiology/ OR Plant and Soil Microbiology	4	3	80	20		4
4.5 Practical Based on paper 4.1	4	3	40	10		2
4.6 Practical Based on paper 4.2	4	3	40	10		2
4.7 Project colloquium & Viva	4	3	50	--		2
4.8 Practical Based on paper 4.4	4	3	40	10		2
<b>TOTAL MARKS (I TO IV SEMESTERS)</b>		<b>2400</b>	<b>Total Credits</b>		<b>96</b>	
<b>HC – Hard core, SC – Soft core, OE – Open Elective</b>						