

1<sup>st</sup> B05 12.6.2015

M.Sc Syllabus (2015-17)

(1 & 2 Approved)



Dharatiya Vidyā  
**Bhavan**

**BHAVAN'S VIVEKANANDA COLLEGE OF SCIENCE, HUMANITIES AND  
COMMERCE, SAINIKPURI, SECUNDERABAD.**

Autonomous College

Affiliated to OSMANIA UNIVERSITY, Hyderabad.

(Accredited with 'A' grade by NAAC)

Department of Microbiology

M.Sc Microbiology Syllabus

(Applicable to the batch of students admitted into M.Sc. I Sem from 2015-16)

M.Sc. (Previous) Microbiology I Semester (15 Weeks)

Paper No.	Sub.Code	Subject/Paper Title	Instruction Hrs/Wk	Exam Internal	Max Marks Semester	Credits
THEORY						
I	PMB 101	General Microbiology	4	30	70	4
II	PMB 102	Virology	4	30	70	4
III	PMB 103	Research Methodology & Techniques	4	30	70	4
IV	PMB 104	Biochemistry	4	30	70	4
PRACTICALS						
I	PMB 151	General Microbiology & Virology	8		100	4
II	PMB 152	Research Methodology & Techniques & Biochemistry	8		100	4
	PMB 199	Seminar	2			
Total			34	120	480	24

M.Sc. (Previous) Microbiology II Semester (15 Weeks)

Paper No.	Sub.Code	Subject/Paper Title	Instruction Hrs/Wk	Exam Internal	Max Marks Semester	Credits
THEORY						
I	PMB 201	Microbial Physiology & Metabolism	4	30	70	4
II	PMB 202	Food Microbiology and Toxicology	4	30	70	4
III	PMB 203	Immunology	4	30	70	4
IV	PMB 204	Pharmaceutical Microbiology	4	30	70	4
PRACTICALS						
I	PMB 251	Microbial Physiology & Metabolism & Food Microbiology and Toxicology	8		100	4
II	PMB 252	Immunology & Pharmaceutical Microbiology	8		100	4
	PMB 299	Seminar	2			
Total			34	120	480	24

Note: The students of M.Sc. Microbiology have to undergo the educational tour to the microbiological based industries/institutes for practical awareness in application of Microbiology at the end of II Semester.

**ACHARYA NAGARJUN .P**  
Chairman, Board of Studies  
Dept. of Microbiology  
Osmania University, Hyderabad.

**J. PRIDEENT Sridevi**  
Head of Department  
Department of Microbiology  
Government College of Arts and Commerce  
Secunderabad



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II	PMB 102	Virology	4	30	70	4
III	PMB 103	Research Methodology & Techniques	4	30	70	4
IV	PMB 104	Biochemistry	4	30	70	4
PRACTICALS						
I	PMB 151	General Microbiology & Virology	8		100	4
II	PMB 152	Research Methodology & Techniques & Biochemistry	8		100	4
	PMB 199	Seminar	2			
Total			34	120	480	24

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THEORY						
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II	PMB 202	Food Microbiology and Toxicology	4	30	70	4
III	PMB 203	Immunology	4	30	70	4
IV	PMB 204	Pharmaceutical Microbiology	4	30	70	4
PRACTICALS						
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**ACHARYA NAGARJUN .P**  
Chairman, Board of Studies  
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**J. PRADEEP Sridhar**  
Head, Department of Microbiology  
Government Engineering College (Women)

2<sup>nd</sup> BOS -

28.03.2016

III &amp; IV Approved


**M.Sc. (Final) Microbiology III Semester (15 Weeks)**

Paper No.	Sub.Code	Subject/Paper Title	Instruction Hrs/Wk	Exam Internal	Max Marks Semester	Credits
THEORY						
I	PMB 301	Molecular Biology and Microbial Genetics	4	30	70	4
II	PMB 302	Industrial Microbiology	4	30	70	4
III	PMB 303	Environmental & Agriculture Microbiology	4	30	70	4
IV	PMB 304	Medical Bacteriology	4	30	70	4
PRACTICALS						
I	PMB 351	Molecular Biology and Microbial Genetics & Industrial Microbiology	8		100	4
II	PMB 352	Environmental & Agriculture Microbiology & Medical Bacteriology	8		100	4
	PMB 399	Seminar	2			
Total .....			34	120	480	24


**M.Sc. (Final) Microbiology IV Semester (15 Weeks)**

Paper No.	Sub.Code	Subject/Paper Title	Instruction Hrs/Wk	Exam Internal	Max Marks Semester	Credits
THEORY						
I	PMB 401	Cell and Molecular Biotechnology	4	30	70	4
II	PMB 402	Microbial Biotechnology	4	30	70	4
III	PMB 403	Medical Virology and Parasitology	4	30	70	4
IV	PMB 404/E1	Microbial Ecology & Plant microbe interactions	4	30	70	4
	PMB 404/E2	Microbial Proteomics				
PRACTICALS						
I	PMB 451	Cell and Molecular Biotechnology & Microbial Biotechnology	8		100	4
III	PMB 452	Medical Virology and Parasitology & Applied Microbiology	8		100	4
	PMB 499	Seminar	2			
Total ...			34	120	480	24

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**ACHARYA NAGARJUN .P**  
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**J. SRIDEVI**  
 Asst. Professor  
 Department of Microbiology  
 Government College of Arts and Sciences  
 Hyderabad


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Paper No.	Sub.Code	Subject/Paper Title	Instruction Hrs/Wk	Exam Internal	Max Marks Semester	Credits
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II	PMB 302	Industrial Microbiology	4	30	70	4
III	PMB 303	Environmental & Agriculture Microbiology	4	30	70	4
IV	P MB 304	Medical Bacteriology	4	30	70	4
PRACTICALS						
I	PMB 351	Molecular Biology and Microbial Genetics & Industrial Microbiology	8		100	4
II	PMB 352	Environmental & Agriculture Microbiology & Medical Bacteriology	8		100	4
	PMB 399	Seminar	2			
Total .....			34	120	480	24

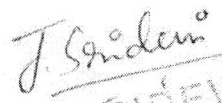
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III	P MB 403	Medical Virology and Parasitology	4	30	70	4
IV	PMB 404/E1	Microbial Ecology & Plant microbe interactions	4	30	70	4
	PMB 404/E2	Microbial Proteomics				
PRACTICALS						
I	PMB 451	Cell and Molecular Biotechnology & Microbial Biotechnology	8		100	4
III	PMB 452	Medical Virology and Parasitology & Applied Microbiology	8		100	4
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Total ...			34	120	480	24

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**ACHARYA NAGARJUN .P**  
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*Usha*

  
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