



Dr. Babasaheb Ambedkar Marathwada University  
University Campus, Aurangabad-431004, Maharashtra(India),  
Recognized by UGC U/s 2(f) and 12(B), NAAC Reaccredited with "A" Grade

## Course Structure Scheme

For

Post Graduate,  
2 Year(s) Master Degree Program in


Faculty of Science

M.Sc. Biotechnology (With Credit)(M.Sc. Biotechnology)  
(Credits System)

(P-2016 Subcenter-Regular)

Course Code: -

Approved

  
Head  
Department of Biotechnology  
Dr. Babasaheb Ambedkar Marathwada  
University, Sub-Centre Osmanabad

### Publisher's Note

This Dr. Babasaheb Ambedkar Marathwada University has great Pleasure in publishing this course structure for Post Graduate course for 2 Year(s) Master Degree Program as "M.Sc. Biotechnology (With Credit)" (P-2016 Subcenter - Regular) under the Faculty of "Faculty of Science".

On behalf of the University, I thank experts and authorities of the University for the interest taken and the whole hearted co-operation extended by them in bringing out this publication.

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,University Campus, Aurangabad-431004,  
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Registrar

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**Course Objective(s)**

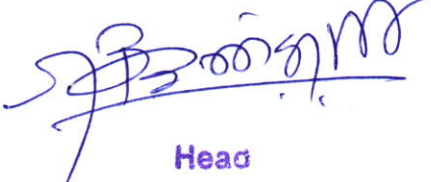
**The M.Sc. Biotechnology (With Credit) Consists of following 2 course part(s):**

Sr.No.	Course Part Name	Course Part Abbreviation	Examination Pattern
1	First Year	First Year	Semester
2	Second Year	Second Year	Semester

**The M.Sc. Biotechnology (With Credit) is available in following medium of instruction/s:**

1. English

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**University, Centre Osmanabad**

## Course Part: First Year

Term: First Semester

The papers for First Year - First Semester are classified into following groups:

**1. Compulsory Group** (Min Papers: 8, Max Papers: 8,  
Separate Passing Head: No, Max. Marks: 650)  
Select minimum 8 paper(s)  
Select maximum 8 paper(s)  
Papers:

IC 001	Constitution of India
BTE 1001	Biomathematics & Biostatistics
BTE 1002	Biomolecules & Bioenergetics
BTE 1003	Microbiology
BTE 1004	Inheritance Biology
BTE 1005	Research Methodology in Biotechnology
BTEP-II	Practical Based on BT 1003 & BT 1004
BTEP-I	Practical Based on BT 1001 & BT 1002

Term: Second Semester

The papers for First Year - Second Semester are classified into following groups:

**1. Compulsory Group** (Min Papers: 8, Max Papers: 8,  
Separate Passing Head: No, Max. Marks: 650)  
Select minimum 8 paper(s)  
Select maximum 8 paper(s)  
Papers:

BTE 2001	Molecular Biology
BTE 2002	Enzyme Technology
BTE 2003	Cell Biology
BTE 2004	Basic Immunology
BTE 2005	Research Design & Literature Survey
BTEP-III	Practical Based on BTE 2001 & BTE 2002
BTEP-IV	Practical Based on BTE 2003 & BTE 2004
BTE 2006	Seminar

## Course Part: Second Year

Term: Third Semester

The papers for Second Year - Third Semester are classified into following groups:

**1. Elective** (Min SubGroups: 1, Max SubGroups: 2,  
Separate Passing Head: No, Max. Marks: 700)  
Select minimum 1 SubGroup(s)  
Select maximum 2 SubGroup(s)  
SubGroups:

**1. Compulsory Group** (Min Papers: 7, Max Papers: 7,  
Separate Passing Head: No, Max. Marks: 600)  
Select minimum 7 paper(s)  
Select maximum 7 paper(s)  
Papers:

BTE 3001	Immunotechnology and Virology
BTE 3002	Gene Expression and Genetic Engineering
BTE 3003	Developmental Biology
BTE 3004	Bioinstrumentation
BTE 3005	Research Project / Dissertation-I
BTEP-V	Practical Based on BTE 3001 & BTE 3002
BTEP-VI	Practical Based on BTE 3003 & BTE 3004

**2. Service Course** (Min Papers: 1, Max Papers: 1,  
Separate Passing Head: No, Max. Marks: 100)  
Select minimum 1 paper(s)

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Select maximum 1 paper(s)

Papers:

ENG-SC-131	Communication Skills in English
CH-SC	Application of Spectroscopy
WLM-236	Integrated Water Resources Management
BT-SC III	Fermentation and Environmental Biotechnology
MIC-SC III	Applied Agricultural Microbiology
MAN-III	Personality Development
EDU-SC-01	Stress Management
SC-01	SC-01
SC-02	SC-02
SC-03	SC-03
SC-04	SC-04
SC-05	SC-05

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Term: Fourth Semester

The papers for Second Year - Fourth Semester are classified into following groups:

**1. Elective** (Min Subgroups: 1, Max SubGroups: 2,  
Separate Passing Head: No, Max. Marks: 800)  
Select minimum 1 SubGroup(s)  
Select maximum 2 SubGroup(s)

SubGroups:

**1. Compulsory Group** (Min Papers: 6, Max Papers: 6,  
Separate Passing Head: No, Max. Marks: 700)  
Select minimum 6 paper(s)  
Select maximum 6 paper(s)

Papers:

BTP 4001	Industrial Technology
BTP 4002	Recombinant DNA Technology
BTP 4003	Tissue Technology
BTP 4004	Bioinformatics
BTR 4005	Dissertation-II
BTEP-4000	Practical Based on Paper BTE 4001,4002,4003, &4004

**2. Service Course** (Min Papers: 1, Max Papers: 1,  
Separate Passing Head: No, Max. Marks: 100)  
Select minimum 1 paper(s)  
Select maximum 1 paper(s)

Papers:

MIC-SC IV	Applied Medical Microbiology
ENG-SC-132	Soft Skills
CHEM-IV	Analytical Chemistry
MAN-IV	Event Management
BTECH-IV	Medical Biotechnology
EDU-SC-02	Psychology of Self Development
SC-01	SC-01
SC-02	SC-02
SC-03	SC-03
SC-04	SC-04
SC-05	SC-05

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