

**PROGRAMME STRUCTURE for M. Sc Biotechnology**

| <b>SEM</b> | <b>Course Code</b> | <b>TITLE</b>   | <b>No of Hrs/week</b> | <b>Marks</b> | <b>Cre-dit</b> |
|------------|--------------------|--|-----------------------|--------------|----------------|
| I          | MLIF 131           | Microbiology   | 4                     | 100          | 4              |
|            | MLIF132            | Biochemistry   | 4                     | 100          | 4              |
|            | MLIF 133           | Cell Biology   | 4                     | 100          | 4              |
|            | MLIF 134           | Genetics   | 4                     | 100          | 4              |
|            | MLIF151            | Practical I- Microbiology and Biochemistry   | 8                     | 100          | 4              |
|            | MLIF152            | Practical II- Cell Biology and Genetics  | 8                     | 100          | 4              |
|            | MLIF135            | Mathematics for Biologists   | 2                     | 50           | 2              |
| II         | MLIF 231           | Molecular Biology  | 4                     | 100          | 4              |
|            | MLIF 232           | Genetic Engineering  | 4                     | 100          | 4              |
|            | MLIF 233           | Bioanalytical Tools and Bioinformatics   | 4                     | 100          | 4              |
|            | MLIF 234           | Research Methodology and Biostatistics   | 4                     | 100          | 4              |
|            | MLIF 251           | Practical III- Molecular Biology and Genetic Engineering                                   | 8                     | 100          | 4              |
|            | MLIF 252           | Practical IV - Bioanalytical Tools, Bioinformatics, Research Methodology and Biostatistics | 8                     | 100          | 4              |
|            | MLIF 235           | Ethics in Science and Medicinal Botany   | 2                     | 50           | 2              |
|            | MLIF 253           | Summer Internship  |                       | 50           | 2              |
| III        | MBTY 331           | Plant Biotechnology  | 4                     | 100          | 4              |
|            | MBTY 332           | Bioprocess Engineering   | 4                     | 100          | 4              |
|            | MBTY 333           | Immunology   | 4                     | 100          | 4              |
|            | MBTY 334           | Animal Biotechnology   | 4                     | 100          | 4              |
|            | MBTY 351           | Practical V- Plant Biotechnology and Bioprocess Engineering                                | 8                     | 100          | 4              |

|          |                       |   |     |     |   |
|----------|-----------------------|---|-----|-----|---|
|          | MBTY 352              | Practical VI- Immunology and Animal Biotechnology       | 8   | 100 | 4 |
| IV       | MBTY 431              | MBTY 431A Food Technology                               | 4   | 100 | 4 |
|          | Elective<br>(any two) | MBTY 431B Pharmacology and Pharmaceutical Biotechnology | 4   | 100 | 4 |
|          |                       | MBTY 431C Environmental Biotechnology                   |     |     |   |
|          |                       | MBTY 431D Disease Biology                               |     |     |   |
|          | MBTY 451              | Practical in Electives                                  | 8   | 100 | 4 |
| MBTY 452 | Industry Project      |   | 150 | 6   |   |