

### BRAINWARE UNIVERSITY SCHOOL OF BIOTECHNOLOGY AND BIOSCIENCES

## DEPARTMENT OF BIOTECHNOLOGY MASTERS OF SCIENCE IN BIOTECHNOLOGY-2022

### Semester-I

| Course<br>Code | Course Name             | L-T-P | Credit(s) | Total Marks |
|----------------|-------------------------|-------|-----------|-------------|
| MBTC101        | Biochemistry            | 3-0-0 | 3         | 100         |
| MBTC191        | Biochemistry Lab        | 0-0-4 | 2         | 100         |
| MBTC102        | Microbial Biology       | 3-0-0 | 3         | 100         |
| MBTC192        | Microbial Biology Lab   | 0-0-4 | 2         | 100         |
| MBTC103        | Cell biology            | 3-0-0 | 3         | 100         |
| MBTC104        | Optical Instrumentation | 3-0-0 | 3         | 100         |
|                | Total                   | 20    | 16        | 600         |



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#### Semester-II

| Course<br>Code | Course Name             | L-T-P      | Credit(s) | Total Marks |
|----------------|-------------------------|------------|-----------|-------------|
|                |                         | Core       |           |             |
| MBTC201        | Immunology              | 3-0-0      | 3         | 100         |
| MBTC291        | Immunology Lab          | 0-0-4      | 2         | 100         |
| MBTC202        | Molecular Biology       | 3-0-0      | 3         | 100         |
| MBTC292        | Molecular Biology Lab   | 0-0-4      | 2         | 100         |
| MBTC203        | Genetic Engineering     | 3-0-0      | 3         | 100         |
|                | Electiv                 | /e course* |           | 1           |
| MBTE204        | Genetics                | 2-0-0      | 2         | 100         |
| MBTE205        | Genomics and Proteomics | 2-0-0      | 2         | 100         |
| MBTE206        | Bioentrepreneurship     | 2-0-0      | 2         | 100         |
|                | Total                   | 21         | 17        | 700         |

<sup>\*</sup>Students have to take at least 4 credit from the offered 6 credit Elective courses.



## BRAINWARE UNIVERSITY SCHOOL OF BIOTECHNOLOGY AND BIOSCIENCES DEPARTMENT OF BIOTECHNOLOGY MASTERS OF SCIENCE IN BIOTECHNOLOGY-2022

### Semester-III

| Course<br>Code | Course Name                                     | L-T-P  | Credit(s) | Total Marks |
|----------------|---|--------|-----------|-------------|
|                | Cor   | e      |           |             |
| MBTC301        | Plant Biotechnology                             | 3-0-0  | 3         | 100         |
| MBTC391        | Plant Biotechnology Lab                         | 0-0-4  | 2         | 100         |
| MBTC302        | Bioprocessing and FermentationTechnology        | 3-0-0  | 3         | 100         |
| MBTC392        | Bioprocessing and<br>FermentationTechnology Lab | 0-0-4  | 2         | 100         |
| MBTC303        | IPR and Biosafety                               | 3-0-0  | 3         | 100         |
|                | Elective o                                      | ourse* |           | •           |
| MBTE304        | Environmental Biotechnology                     | 2-0-0  | 2         | 100         |
| MBTE305        | Animal Biotechnology                            | 2-0-0  | 2         | 100         |
| MBTE306        | Enzymology                                      | 2-0-0  | 2         | 100         |
|                | Total   | 21     | 17        | 700         |

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### Semester-IV

| Course<br>Code | Course Name                     | L-T-P | Credit(s) | Total Marks |
|----------------|---------------------------------|-------|-----------|-------------|
| MBTP481        | Internship/ Industrial Training | -     | 20        | 100         |
| MBTP482        | MSCBT Project Work & Viva       | -     | 20        | 100         |
|                | Total                           | -     | 40        | 200         |

Total Marks: 2200 Total Credits: 90