

## COURSE AT A GLANCE

SUBJECT: BIOTECHNOLOGY

ACADEMIC SESSION: **2025-26****First Semester-December, 2025**

| Course Number | Course Title                                  | Credit Hour  | Mark Distribution | Maximum Marks |
|---------------|-----------------------------------------------|--------------|-------------------|---------------|
| 411           | CHEMISTRY OF BIOMOLECULES                     | 4(Theory)    | 20+80             | 100           |
| 412           | GENETICS AND BIOSTATISTICS                    | 4(Theory)    | 20+80             | 100           |
| 413           | MICROBIOLOGY                                  | 4(Theory)    | 20+80             | 100           |
| 414           | MOLECULAR BIOLOGY-I                           | 4(Theory)    | 20+80             | 100           |
| 415           | ELECTIVE-1                                    | 2(Theory)    | 100               | 100           |
| 416           | PRACTICAL-1                                   | 2(Practical) | 100               | 100           |
| 417           | Environmental Studies and Disaster Management | 2            | 40+60             | 100           |

**Second Semester-April, 2026**

| Course Number | Course Title                            | Credit Hour  | Mark Distribution | Maximum Marks |
|---------------|-----------------------------------------|--------------|-------------------|---------------|
| 421           | MOLECULAR BIOLOGY-II                    | 4(Theory)    | 20+80             | 100           |
| 422           | BIOENERGETICS AND METABOLISM            | 4(Theory)    | 20+80             | 100           |
| 423           | INSTRUMENTATION AND TECHNOLOGY          | 4(Theory)    | 20+80             | 100           |
| 424           | INDUSTRIAL MICROBIOLOGY                 | 4(Theory)    | 20+80             | 100           |
| 425           | PRACTICAL-II                            | 2(Practical) | 100               | 100           |
| 426           | PRACTICAL-III                           | 2(Practical) | 100               | 100           |
| 427           | BIOTECHNOLOGY AND ITS APPLICATION (IDC) | 3            | 40+60             | 100           |

**Third Semester-December, 2026**

| Course Number | Course Title                                    | Credit Hour  | Mark Distribution | Maximum Marks |
|---------------|-------------------------------------------------|--------------|-------------------|---------------|
| 511           | RECOMBINANT DNA TECHNOLOGY, IPRs AND BIOSAFETY  | 4(Theory)    | 20+80             | 100           |
| 512           | IMMUNOLOGY                                      | 4(Theory)    | 20+80             | 100           |
| 513           | PLANT AND ANIMAL BIOTECHNOLOGY                  | 4(Theory)    | 20+80             | 100           |
| 514           | CELL CULTURE TECHNIQUES AND DEVELOPMENT BIOLOGY | 4(Theory)    | 20+80             | 100           |
| 515           | PRACTICAL -IV                                   | 2(Practical) | 100               | 100           |
| 516           | SEMINAR                                         | 2(Practical) | 100               | 100           |
| 517           | Entrepreneurship Development                    | 2            | 40+60             | 100           |

**Fourth Semester-April, 2027**

| Course Number | Course Title                          | Credit Hour  | Mark Distribution | Maximum Marks |
|---------------|---------------------------------------|--------------|-------------------|---------------|
| 521           | GEONIMCS, PROTEOMICS AND METABOLOMICS | 4(Theory)    | 20+80             | 100           |
| 522           | BIOPROCESS ENGINEERING                | 4(Theory)    | 20+80             | 100           |
| 523           | CONCEPT OF BIOINFORMATICS             | 4(Theory)    | 20+80             | 100           |
| 524           | ELECTIVE-2                            | 4(Theory)    | 100               | 100           |
| 525           | PROJECT REPORT                        | 2(Practical) | 100               | 100           |
| 526           | PROJECT VIVA VOCE                     | 2(Practical) | 100               | 100           |
| 527           | MOOC                                  | 3            |                   | 100           |

