

B.Tech – BIOTECHNOLOGY

Semester – III

Course Code	Subject Title
BIOT 301	Mathematics - III
BIOT 302	Environmental Science and Engineering
BIOT 303	Cell biology
BIOT 304	Microbiology
BIOT 305	Bioorganic chemistry
BIOT 306	Principle of Chemical Engg.
BIOT 307 P	Biochemistry and bioorganic Chemistry Lab
BIOT 308 P	Cell Biology and Microbiology Lab

Semester – IV

Course Code	Subject Title
BIOT 401	Numerical methods & statistics
BIOT 402	Molecular biology & Genetics
BIOT 403	Basic industrial Biotechnology
BIOT 404	Analytical Instruments and Techniques
BIOT 405	Unit Operations of Chemical Engineering
BIOT 406	Chemical thermodynamics and Bio thermodynamics
BIOT 407 P	Analytical Instruments and techniques Lab
BIOT 408 P	Chemical Engineering Lab - I

Semester – V

Course Code	Subject Title
BIOT 501	Professional Ethics and Human Values
BIOT 502	Genetic Engineering
BIOT 503	Mass transfer operations
BIOT 504	Chemical Reaction Engineering
BIOT 505	Enzyme Engineering and technology
BIOT 506	Bioprocess Engineering – I
BIOT 507 P	Molecular biology and Genetic Engineering Lab
BIOT 508 P	Bioprocess Engineering Lab – I

Semester – VI

Course Code	Subject Title
BIOT 601	Protein Engineering
BIOT 602	Plant biotechnology
BIOT 603	Animal biotechnology
BIOT 604	Process control
BIOT 605	Bioprocess Engineering – II
BIOT 606 E0	Elective – I
BIOT 607 P	Chemical Engineering Lab – II
BIOT 608 P	Bioprocess Engineering Lab - II

ELECTIVES

1. BIOT 606 E01 Biopharmaceutical Technology
2. BIOT 606 E02 Environmental Biotechnology
3. BIOT 606 E03 Food process Technology
4. BIOT 606 E04 Genomics and proteomics

Semester – VII

Course Code	Subject Title
BIOT 701	Bioinformatics
BIOT 702	Immunology
BIOT 703	Down stream processing
BIOT 704	Bioprocess Equipment design and drawing
BIOT 705	Bio-process Economics and Plant design
BIOT 706	Elective –II
BIOT 707 P	Immunology Lab
BIOT 708 P	Down stream processing Lab

Electives :

1. BIOT 706 E01 Bio-ethics and bio-safety
2. BIOT 706 E02 Cancer biology
3. BIOT 706 E03 Molecular modeling and Drug design
4. BIOT 706 E04 Metabolic Engineering

Semester – VIII

Course Code	Subject Title
BIOT 801	Project work