

Curriculum BS Biotechnology

YEAR ONE / SEMESTER ONE

S. No	Name of Subject	Credits
ENG 101	English-I (C)	3+0
PS 101	Pakistan Studies (C)	2+0
MTH 107	Mathematics-I (Pre-calculus) (C)	3+0
BIOT 101	Ecology, Biodiversity & Evolution - I (G)	3+0
CH 101	Inorganic Chemistry (G) (HEC = 2+1)	3+1
BIOT 102	Introduction to Computer Science (C)	2+1
	Total	18

YEAR ONE / SEMESTER TWO

S. No	Name of Subject	Credits
ENG 151	English-II (C)	3+0
ISL 151	Islamic Studies/Ethics (C)	2+0
MTH 151	Biomathematics (C)	3+0
CH 151	Organic Chemistry (G) (HEC = 2+1)	3+1
BIOT 151	Ecology, Biodiversity & Evolution - II (G)	2+1
BIOT 152	Cell Biology (F)	2+1
	Total	18

YEAR TWO/SEMESTER THREE

S. No	Name of Subject	Credits
ENG 201	English-III (C)	3+0
BIOT 201	Microbiology (F)	2+1
BIOT 202	Physical Chemistry (G)	3+0
SOC 106	Principles of Sociology (HEC = Sociology) (G)	3+0
BIOT 203	Biochemistry - I (F)	2+1
BIOT 204	Classical Genetics (F)	3+0
	Total	18

YEAR TWO /SEMESTER FOUR

S. No	Name of Subject	Credits
BIOT 251	Biological Physics (G)	3+0
BIOT 252	Probability & Biostatistics (F)	3+0
BIOT 253	Environmental Policy (G)	3+0
BIOT 254	Analytical Chemistry & Instrumentation. (F)	2+1
BIOT 255	Biochemistry - II (F)	2+1
BIOT 256	Molecular Biology (F)	3+0
	Total	18

YEAR THREE /SEMESTER FIVE

S. No	Name of Subject	Credits
BIOT 301	Introduction to Biotechnology (F)	3+0
BIOT 302	Immunology (F)	3+0
BIOT 303	Methods in Molecular Biology (F)	1+2
BIOT 304	Principles of Biochemical Engineering (M)	2+1
BIOT 305	Bioinformatics (M)	1+2
	Total	15

YEAR THREE /SEMESTER SIX

S. No	Name of Subject	Credits
BIOT 351	Genetic resources & Conservation (F)	3+0
BIOT 352	Microbial Biotechnology (F)	3+0
BIOT 353	Agriculture Biotechnology (M)	2+1
BIOT 354	Food Biotechnology (M)	3+0
BIOT 355	Animal Biotechnology (E)	3+0
BIOT 356	Research Methodology & Skill Enhancement (M)	3+0
	Total	18

YEAR FOUR /SEMESTER SEVEN

S. No	Name of Subject	Credits
BIOT 401	Health Biotechnology. (M)	3+0
BIOT 402	Seminar-I (M)	1+0
BIOT 403	Nano Biotechnology (E)	3+0
BIOT 404	Genomics and Proteomics (M)	3+0
BIOT 405	Virology (E)	3+0
BIOT 406	Cell and Tissue Culture (E)	3+0
	Total	16

Note*: Research project includes Literature survey, Proposal writing and proposal presentation.

YEAR FOUR /SEMESTER EIGHT

S. No	Name of Subject	Credits
BIOT 451	Environmental Biotechnology (M)	3+0
BIOT 452	Seminar - II (M)	1+0
BIOT 453	Industrial Biotechnology	3+0
BIOT 454	Bio-safety & Bioethics (C)	2+0
BIOT 455	Special Paper-I	3+0
BIOT 456	Special Paper-II	3+0
	OR	
BIOT 457	Research project / Internship	6+0
	Total	15