



# BSc-Life Science & BSc-Microbiology Curriculum

## B.Sc. Life Science (Total credits – 146)

Sem	Core course	Ability enhancement course	Skill-based course	Science Electives	Credits
I	LS177- Living world and diversity (3) LS178- Microbial, Plant and Animal Physiology (3) LS103- Life Science Laboratory I (2) LS104- Life Science Laboratory II (1) CH104- Inorganic Chemistry (3) CH105- Chemistry Laboratory - II (2)	MA110- Foundation Mathematics I (3) LC117- Communication I (3)	MG117- Principles of Management, Accounts (3)		23
II	Biochemistry-I (3) Cytology and Genetics (3) LS138- Life Science Laboratory III (2) LS139- Life Science Laboratory IV (1) CH109- Conceptual Organic Chemistry (3) CH108- Chemistry Laboratory - IV (2)	HS106- Humanities (2) MA117- Foundation Mathematics II (3) HS150- Communication II (3)	MG108- Economics and Finance (3)		25
III	LS273 - Ethno and Economic Biology (3) LS274 - Plant Morphology and Anatomy (3) LS275 - Biochemistry-II (3) LS234- Life Science Laboratory V (3) LS235- Life Science Laboratory VI (2) CH203- Molecule of Life (3) CH205- Chemistry Laboratory - VI (2)		ID- Interdisciplinary course (2) MG- Management (2)		23

Sem	Core course	Ability enhancement course	Skill-based course	Science Electives	Credits
IV	LS150- Biophysics, Biostatistics and Biochemical Techniques (3) LS151- Comparative Functional Anatomy and Physiology (3) Parasitology, Histopathology and Plant Pathology (3) LS153-Life Science Laboratory VII (3) LS154-Life Science Laboratory VIII (2) CH208-Physical Chemistry (3) CH105-Chemistry Laboratory-VIII (2)	ES201- Environment Science (4)	ID- Interdisciplinary course (2) HR311- Introduction to HR and Marketing II (2)		27
V	BC302- Biotechnology and Bioinformatics (3) LS301-Molecular Biology, Endocrinology and Phytohormones (3) LS302-Defense mechanisms in plants and animals (3) LS305-Life Science Laboratory IX (4) LS306-Life Science Laboratory X (4)	DS309- Scientific Enquiry and Research Methodology (2)	PS310- Khoj (3)	Any one of the following: SE201-Essential Laboratory Practices (2) SE202-Food and Nutrition (2) SE213- Introduction to Neuroscience and Cognition (2) SE305- Introduction to cell/tissue culture (2)	24
VI	Plant and Animal Molecular Embryology (3) Taxonomy of Plants and Animals (3) Wildlife and Conservation Biology (3) Life Science Laboratory XI (4) Life Science Laboratory XII (4) Project Work (2)		MG321- Entrepreneurship (3)	Any one of the following: SE210-Foods and Nutrition II (2) SE310- Introduction to Pharmacognosy (2) SE318- Introduction to forensic science (2) SE208-Herbal Cosmetics (2)	24

**B.Sc. Microbiology (Total credits - 146)**

Sem	Core course	Ability enhancement course	Skill-based course	Science Electives	Credits
I	LS177- Living world and diversity (3) LS178 -Microbial, Plant and Animal Physiology (3) LS103- Life Science Laboratory I (2) LS104- Life Science Laboratory II (1) CH104- Inorganic Chemistry (3) CH105- Chemistry Laboratory - II (2)	MA110- Foundation Mathematics I (3) LC117- Communication I (3)	MG117- Principles of Management, Accounts (3)		23
II	Biochemistry-I (3) Cytology and Genetics (3) LS138 - Life Science Laboratory III (2) LS139 - Life Science Laboratory IV (1) CH109 - Conceptual Organic Chemistry (3) CH108- Chemistry Laboratory - IV (2)	HS106- Humanities (2) MA117- Foundation Mathematics II (3) HS150- Communication II (3)	MG108- Economics and Finance (3)		25
III	LS273 - Ethno and Economic Biology (3) LS274 - Microbiology-I (3) LS275 - Biochemistry-II (3) LS234 - Life Science Laboratory V (3) LS127 - Microbiology Laboratory (2) CH203 - Molecule of Life (3) CH205 - Chemistry Laboratory-VI (2)		ID- Interdisciplinary course (2) MG- Management (2)		23
IV	LS150 - Biophysics, Biostatistics and Biochemical Techniques (3) BO211 - Microbiology- II (3) Parasitology, Histopathology and Plant Pathology (3) LS153- Life Science Laboratory VII (3) BO212 - Microbiology Laboratory I (2) CH208 - Physical Chemistry (3) CH105 - Chemistry Laboratory - VIII (2)	ES201- Environment Science (4)	ID- Interdisciplinary course (2) HR311- Introduction to HR and Marketing II (2)		27

Sem	Core course	Ability enhancement course	Skill-based course	Science Electives	Credits
V	BC302 - Biotechnology and Bioinformatics (3) MI202 - Microbial Physiology and Metabolism (3) MI203 - Molecular Biology and Microbial Genetics (3) MI204 - Microbiology Laboratory II (4) MI205 - Microbiology Laboratory III (4)	DS309 - Scientific Enquiry and Research Methodology (2)	PS310 - Khoj (3)	Any one of the following: SE201- Essential Laboratory Practices (2) SE202- Food and Nutrition (2) SE213- Introduction to Neuroscience and Cognition (2) SE305- Introduction to cell /tissue culture (2)	24
VI	MI301- Medical Microbiology (3) MI302- Industrial & Food Microbiology (3) MI305- Biofertilizers and Biopesticides (3) MI303 - Life Science Laboratory IV (4) MI304 - Life Science Laboratory V (4) Project Work (2)		MG321- Entrepreneurship (3)	Any one of the following: SE210- Foods and Nutrition II (2) SE310- Introduction to Pharmacognosy (2) SE318- Introduction to forensic science (2) SE208- Herbal Cosmetics (2)	24

