

• **SEMESTER WISE COURSE LAYOUT B.Sc Agri (Biotech)**

Semester-wise Subjects Offered:			
Semester I		Semester V	
BIO-111	Basic Biochemistry	BIO-358	Recombinant DNA Technology
PB-111	Fundamentals of Genetics	PB-357	Biotechnology of Biotic and Abiotic Stress Tolerance
CS-111	Principles of Plant Physiology	PB-358	Biodiversity Conservation
CS-112	Field Crop Production	FB-355	Technological Applications in Food Processing
CS-113	Introductory Entomology	AB-354	Dairy Process Biotechnology
LANG-111	Comprehension & Communication Skills in English(NC)	AB-355	Livestock Genome
PHY-EDN-111	Physical Education (NC)	CS-3510	Computer Applications in Biotechnology
MATH-111	Mathematics (Deficiency course)		
Semester II		Semester VI	
BIO-122	Enzymology	BIO-369	Molecular Plant Virology
BIO-123	Microbial Genetics	PB-369	Introduction to Bioinformatics
PB-122	Cell Biology	PB-3610	Biosafety Issues
PB-123	Introduction to Plant Biotechnology	FB-366	Post-harvest Biotechnology of Horticultural Crops
FB-121	Human Nutrition	FB-367	Food and Nutrition Security of GM Food Crops
CS-124	Fundamentals of Plant Pathology	AB-366	Animal Genetic Engineering
CS-125	Agricultural Microbiology	CS-3611	Management of Major Insect Pests & Diseases of Field & Management of Major Insect Paste and Diseases of field and Horticultural Crops
CS-126	Horticultural Crop Production	CS-3612	Marketing and Export of Biotechnological Products
NCC/NS S-121	National Cadet Crops/National Service Scheme (NCC/NSS) (NC)		
Semester III		Semester VII	
BIO-234	Molecular Biology	CS-4713	Seminar
BIO-235	Plant Metabolic Pathways		Cafeteria Course of major departments
BIO-236	Elements of Immunology		Cafeteria Course of minor departments (I)
PB-234	Plant Breeding Techniques		Cafeteria Course of minor departments (II)
PB-235	Molecular Markers in Plant Breeding		
FB-232	Industrial Microbiology and Fermentation Technology		
AB-231	Basics in Animal Biotechnology		
CS-237	Greenhouse Technology and Protected Cultivation		

Semester IV		Semester VIII	
BIO-247	Techniques in Biochemistry and Molecular Biology	HORT-481	Hands on training
PB-246	Plant Cell and Tissue Culture		
FB-243	Enzyme Biotechnology in Food Processing		
FB-244	Post-harvest Biotechnology of Food Grains		
AB-242	Animal Cell Culture		
AB-243	Biotechnology of Ruminant Feed Utilization		
CS-248	Bio-Statistics		
CS-249	Intellectual Property Right		

- **Course Structure**

Semester-wise Subjects Offered:			
Semester I		Semester V	
BIO-111	Basic Biochemistry	BIO-358	Recombinant DNA Technology
PB-111	Fundamentals of Genetics	PB-357	Biotechnology of Biotic and Abiotic Stress Tolerance
CS-111	Principles of Plant Physiology	PB-358	Biodiversity Conservation
CS-112	Field Crop Production	FB-355	Technological Applications in Food Processing
CS-113	Introductory Entomology	AB-354	Dairy Process Biotechnology
LANG-111	Comprehension & Communication Skills in English(NC)	AB-355	Livestock Genome
PHY-EDN-111	Physical Education (NC)	CS-3510	Computer Applications in Biotechnology
MATH-111	Mathematics (Deficiency course)		
Semester II		Semester VI	
BIO-122	Enzymology	BIO-369	Molecular Plant Virology
BIO-123	Microbial Genetics	PB-369	Introduction to Bioinformatics
PB-122	Cell Biology	PB-3610	Biosafety Issues
PB-123	Introduction to Plant Biotechnology	FB-366	Post-harvest Biotechnology of Horticultural Crops
FB-121	Human Nutrition	FB-367	Food and Nutrition Security of GM Food Crops
CS-124	Fundamentals of Plant Pathology	AB-366	Animal Genetic Engineering
CS-125	Agricultural Microbiology	CS-3611	Management of Major Insect Pests & Diseases of Field & Management of Major Insect Paste and Diseases of field and Horticultural Crops
CS-126	Horticultural Crop Production	CS-3612	Marketing and Export of Biotechnological Products
NCC/NS	National Cadet Crops/National		

S-121	Service Scheme (NCC/NSS) (NC)		
Semester III		Semester VII	
BIO-234	Molecular Biology	CS-4713	Seminar
BIO-235	Plant Metabolic Pathways		Cafeteria Course of major departments
BIO-236	Elements of Immunology		Cafeteria Course of minor departments (I)
PB-234	Plant Breeding Techniques		Cafeteria Course of minor departments (II)
PB-235	Molecular Markers in Plant Breeding		
FB-232	Industrial Microbiology and Fermentation Technology		
AB-231	Basics in Animal Biotechnology		
CS-237	Greenhouse Technology and Protected Cultivation		
Semester IV		Semester VIII	
BIO-247	Techniques in Biochemistry and Molecular Biology	HORT-481	Hands on training
PB-246	Plant Cell and Tissue Culture		
FB-243	Enzyme Biotechnology in Food Processing		
FB-244	Post-harvest Biotechnology of Food Grains		
AB-242	Animal Cell Culture		
AB-243	Biotechnology of Ruminant Feed Utilization		
CS-248	Bio-Statistics		
CS-249	Intellectual Property Right		