# **B. Sc. (Hons) Agriculture**

# **Departmentwise list of courses**

# 1) <u>Agronomy</u>

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	AGRO 111	2(1+1)	Fundamentals of Agronomy-I
2	Ι	AGRO 112	2(1+1)	Introductory Agro-meteorology and Climate change
3	II	AGRO 123	2(1+1)	Fundamentals of Agronomy-II
4	III	AGRO 234	2(1+1)	Crop Production Technology-I (Kharif crops)
5	III	AGRO235	2(1+1)	Rainfed Agriculture and Watershed Management
6	IV	AGRO 246	2(1+1)	Crop Production Technology-II (Rabi crops)
7	IV	AGRO 247	1(1+0)	Farming System and Sustainable Agriculture
8	IV	AGRO248	2(1+1)	Principles of Organic Farming
9	V	AGRO359	1(0+1)	Practical Crop Production-I (Kharif crops)
10	V	ELE AGRO 3510	3(2+1)	Weed Management
11	VI	AGRO3611	1(0+1)	Practical Crop Production-II(Rabi crops)
12	VI	AGRO 3612	2(1+1)	Geo-informatics and Nano-technology and Precision Farming
13	VIII	ELM AGRO 4813	10(0+10)	Organic Farming Production Technology
14	VIII	ELM AGRO 4814	10(0+10)	Commercial production of organic inputs

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	Π	GPB 121	3(2+1)	Fundamentals of Genetics
2	П	BOT 121	2(1+1)	Fundamentals of Crop Physiology
3		GPB 232	2(1+1)	Fundamentals of Plant Breeding
4	IV	GPB 243	3(1+2)	Principles of Seed Technology
5	IV	ELE GPB 244	3(1+2)	Commercial Plant breeding
6	IV	ELE BOT 242	3(1+2)	Micropropogation Technologies
7	V	GPB 355	2(1+1)	Crop Improvement – I (Kharif Crops)
8	V	BOT 353	1(1+0)	Intellectual Property Right
9	VI	GPB 366	2(1+1)	Crop Improvement – II (Rabi crops )
10	VIII	ELM BOT 484	10(0+10)	Seed Production and Technology
11	VIII	ELM BOT 485	10(0+10)	Tissue Culture

#### 2) Genetics and Plant Breeding

# 3) <u>Agril. Entomology</u>

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	II	ENTO 121	2(1+1)	Fundamentals of Entomology
2	III	ENTO 232	2(1+1)	Insect Ecology and Integrated pest Management
3	IV	ENTO 243	2(1+1)	Pest of Horticultural Crops and their Management
4	V	ENTO 354	2(1+1)	Pests of Crops and Stored Grain and their Management
5	VI	ENTO 365	2(1+1)	Management of Beneficial Insects
5	VIII	ELM ENTO 486	10(0+10)	Mass Production of Bioagents and Biopesticides
6	VIII	ELM ENTO 487	10(0+10)	Commercial Bee Keeping
7	VIII	ELM ENTO 488	10(0+10)	Silkworm Cocoon Production Technology

#### 4) <u>Horticulture</u>

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	HORT 111	2(1+1)	Fundamentals of Horticulture
2	III	HORT 232	2(1+1)	Production Technology for Vegetables and Spices
3	IV	HORT 243	2(1+1)	Production Technology for Fruit and Plantation Crops
4	V	HORT 354	2(1+1)	Production Technology for Ornamental Crops, MAP and Landscaping
5	V	ELE HORT 355	3(2+1)	Protected cultivation
6	VI	HORT 366	2(1+1)	Post-harvest Management and Value Addition of Fruits and Vegetables
7	VI	ELE HORTI 367	3(2+1)	Landscaping
8	VI	ELE HORT 368	3(2+1)	Hi-tech Horticulture
9	VIII	ELM HORT 489	10(0+10)	Commercial Horticulture
10	VIII	ELM HORT 4810	10(0+10)	Floriculture and Landscaping Gardening
11	VIII	ELM HORT 4811	10(0+10)	Nursery Management of Horticultural Crops
12	VIII	ELM HORT 4812	10(0+10)	Commercial Vegetable Production
13	VIII	ELM HORT 4813	10(0+10)	Protected Cultivation of Flowers and
				Vegetables
14	VIII	ELM HORT 4814	10(0+10)	Post-harvest Management and Valise Additions of Horticultural Crops

# 5) <u>Agricultural Economics</u>

Sr. No.	Semester	Course No.	Credits	Course Title
1	II	ECON 121	2(2+0)	Fundamentals of Agricultural Economics
2	IV	ECON 242	3(2+1)	Agriculture Finance and Cooperation
3	V	ECON 353	3(2+1)	Agricultural Marketing Trade and Prices
4	V	ELE ECON 354	3(2+1)	Agribusiness Management
5	VI	ECON 365	2(1+1)	Farm Management, Production and Resource Economics

#### 6) Agril. Extension Education

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	EXTN 111	2(2+0)	Rural Sociology & Educational Psychology
2	II	EXTN 122	3(2+1)	Fundamentals of Agricultural Extension Education
3	II	EXTN 123	2(1+1)	Communication Skills and personality Developments (Common Course)
4	IV	ELE EXTN 244	3(2+1)	Agricultural Journalism
5	V	EXTN 355	2(1+1)	Entrepreneurship Development and Business Communication (Common Course)

### 7) Agril. Engineering

Sr. No.	Semester	Course No.	Credits	Course Title
1	II	ENGG 121	2(1+1)	Soil and Water Conservation Engineering
2	III	ENGG 232	2(1+1)	Farm Machinery and Power
3	IV	ENGG 243	2(1+1)	Renewable Energy and Green Technology
4	VI	ENGG 364	2(1+1)	Protected Cultivation and secondary Agriculture
5	VIII	ELM ENGG 485	10(0+10)	Natural Resources Management

#### 8) <u>Plant Pathology</u>

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	Ι	MIBO 111	2(1+1)	Introductory Microbiology
2	II	PATH 121	3(2+1)	Fundamentals of Plant Pathology
3	II	PATH 232	2(1+1)	Principles of Integrated Disease
				Management
4	IV	ELE PATH 243	3(2+1)	Bio-fertilizers, Bio-control Agents and
				Bio-pesticides
5	V	PATH 354	3(2+1)	Diseases of Field and Horticultural
				Crops and their Management – I
6	VI	PATH 365	3(2+1)	Diseases of Field and Horticultural
				Crops and their Management-II
7	VIII	ELM PATH 486	10(0+10)	Mushroom Cultivation Technologies

#### 9) Soil Science and Agril. Chemistry

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	SSAC 111	3(2+1)	Fundamentals of Soil Science
2	IV	SSAC 242	2(1+1)	Problematic Soils and their Management
3	V	SSAC 353	3(2+1)	Manures, Fertilizers and Soil Fertility Management
4	VI	ELE SSAC 364	3(2+1)	Agrochemicals
5	VIII	ELM SSAC 485	10(0+10)	Soil, Water, Plant and Fertilizer Analysis
6	VIII	ELM SSAC 486	10(0+10)	Agricultural Waste Management
		Total		

# 10) Animal Husbandry and Diary science

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	AHDS-111	1+1=2	Livestock Production and Management
2	IV	AHDS-242	1+1=2	Livestock Breeding and Nutrition
3	V	AHDS-353	1+1=2	Technology of Milk and Milk Products
4	VI	AHDS-364	1+1=2	Sheep, Goat and Poultry Production
5	VIII	ELM AHDS 485	10(0+10)	Poultry Production
6	VIII	ELM AHDS 486	10(0+10)	Processing of Milk and Milk Products
		Total		

#### 11) <u>Other courses</u>

Sr. No.	Semester	Course No.	Credits	Course Title
1	Ι	LANG 111	2(1+1)	Comprehension & Communication Skills in English
2	III	STAT 231	2(1+1)	Statistical Methods
3	III	BIOCHM 231	3(2+1)	Fundamentals of plant biochemistry and biotechnology
4	III	COMP 231	2(1+1)	Agri- Informatics (Common Courses)
5	III	EVS 231	3(2+1)	Environmental Studies and Disaster Management (Common Course)

Sr. No.	Semester	Course No.	Credits	Course Title
6	V	ELE FST 351	3(2+1)	Food Safety and Standards (Elective)
7	VI	FST 362	2(2+0)	Principles of Food Science and Nutrition
8	VI	ELE AGM 361	3(2+1)	System Stimulation and Agro- advisory
9	VIII	ELM FST 483	10(0+10)	Food Processing
		Total		

# 12) <u>Common Courses</u>

Sr. No.	Semester	Course No.	Credits	Course Title
1	III	EVS 231	3(2+1)	Environmental Studies and Disaster Management
2	II	EXTN 123	2(1+1)	Communication skills and personality Development
3	V	EXTN 355	2(1+1)	Entrepreneurship Development and Business Management
4	III	COMP 231	2(1+1)	Agri-Informatics
		Total	9(5+4)	

# 13) <u>Elective Courses</u>

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	V	ELE AGRO 3510	3(2+1)	Weed Management
2	IV	ELE GPB 244	3(1+2)	Commercial Plant breeding
3	IV	ELE BOT 242	3(1+2)	Micropropogation Technologies
4	V	ELE HORT 355	3(2+1)	Protected cultivation
5	VI	ELE HORTI 367	3(2+1)	Landscaping
6	VI	ELE HORT 368	3(2+1)	Hi-tech Horticulture
7	V	ELE ECON 354	3(2+1)	Agribusiness Management
8	IV	ELE EXTN 244	3(2+1)	Agricultural Journalism
9	IV	ELE PATH 243	3(2+1)	Bio-fertilizers, Bio-control Agents and
				Bio-pesticides
10	VI	ELE SSAC 364	3(2+1)	Agrochemicals
11	V	ELE FST 351	3(2+1)	Food Safety and Standards
12	VI	ELE AGM 361	3(2+1)	System Stimulation and Agro-advisory
		Total		

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	Ι	AGH 111	1(1+0)	Agricultural Heritage* <sup>1</sup>
2	Ι	MATH 111	2(2+0)	Elementary Mathematics * <sup>2</sup>
3	Ι	BIO 111	2(1+1)	Introductory biology * <sup>3</sup>

#### 14) <u>Remedial Courses (3/4 credits)</u>

\*<sup>1</sup>Compulsory to all students

\*<sup>2</sup> Students who have Biology in XII std are exempted

\*<sup>3</sup>Students who have MATH in XII std are exempted

#### 15) <u>Non-Gradial Courses (8 credits)</u>

Sr.	Semester	Course No.	Credits	Course Title
No.				
1	Ι	HVE 111	1(1+0)	Human Values & Ethics
2	Ι	DEG 111	1(1+0)	Democracy, Elections and Good
				Governance
3	Ι	NCC 111/	1(0+1)	NCC/ NSS
		NSS 111/		
4	Ι	PEY 111	1(0+1)	Physical Education and Yoga
5	II	FRST 121	2(1+1)	Introduction to Forestry
6	II	EDUT 121	1(0+1)	Educational Tour
7	IV	EDUT 242	1(0+1)	Educational Tour
		Total	8(3+5)	