



JAGADGURUKUL
UNIVERSITY

Faculty of Science

**B.Sc. (Agriculture)
(2015-16)**

Program Structure

Department of Agriculture

B.Sc. (Ag.) Course Structure (2015-16)

Semester I

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 101	Introductory Agriculture and Principles of Agronomy	30	70	50	150	3(2+1)
AG 102	Principles of Genetics	30	70	50	150	3(2+1)
AG 103	Introduction to Soil Science	30	70	50	150	3(2+1)
AG 104	Dimensions of Agricultural Extension	30	70	50	150	2(1+1)
AG 105	Agricultural Microbiology	30	70	50	150	3(2+1)
AG 106	Elementary Mathematics	30	70	0	100	2(2+0)
AG 107	Comprehensive and Communication Skills in English	30	70	50	150	3(2+1)
AG 108	Introduction to Computer Applications	30	70	50	150	2(1+1)
AG 109	NCC/NSS/ Physical Education	-	-	-	-	3(2+1)
		240	560	350	1150	21

Semester II

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 201	Agricultural Meteorology	30	70	50	150	2(1+1)
AG 202	Principles of Plant Breeding	30	70	50	150	3(2+1)
AG 203	Plant Pathogens and Principles of Plant Pathology	30	70	50	150	4(3+1)
AG 204	Insect Morphology and Systematics	30	70	50	150	3(2+1)
AG 205	Principles of Agricultural Economics	30	70	0	100	2(2+0)
AG 206	Fundamentals of Soil and Water Conservation Engineering	30	70	50	150	2(1+1)
AG 207	Biochemistry	30	70	50	150	3(2+1)
AG 208	Soil Chemistry, Soil Fertility and Nutrient Management	30	70	50	150	2(1+1)
		240	560	350	1050	21

Semester III

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 301	Field Crops - I (Kharif)	30	70	50	150	3(2+1)
AG 302	Weed Management	30	70	50	150	2(1+1)
AG 303	Introductory Nematology	30	70	50	150	2(1+1)
AG 304	Statistics	30	70	50	150	3(2+1)
AG 305	Fundamentals of Rural Sociology and Educational Psychology	30	70	0	100	2(2+0)
AG 306	Production Technology of Fruits and Plantation Crops	30	70	50	150	3(2+1)
AG 307	Production Economics and Farm Management	30	70	50	150	2(1+1)
AG 308	Farm Power and Machinery	30	70	50	150	2(1+1)
AG 309	Manures and Fertilizers	30	70	50	150	2(1+1)
		270	630	400	1300	21

Semester IV

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 401	Field Crops- II (Rabi)	30	70	50	150	3(2+1)
AG 402	Water Management	30	70	50	150	2(1+1)
AG 403	Soil Survey, Land Use Planning and Remote Sensing	30	70	50	150	2(1+1)
AG 404	Insect Ecology and Integrated Pest Management including Beneficial Insects	30	70	50	150	3(2+1)
AG 405	Production Technology of Vegetables and Flowers	30	70	50	150	4(3+1)
AG 406	Agricultural Finance and Co-operation	30	70	50	150	2(1+1)
AG 407	Crop Physiology	30	70	50	150	3(2+1)
AG 408	Entrepreneurship Development and Communication Skills	30	70	50	150	2(1+1)
AG 409	NCC/NSS	0	0	100	100	1(0+1)
		240	560	450	1250	22

Semester V

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 501	Practical Crop Production -1(Kharif crops)	0	0	50	50	1(0+1)
AG 502	Rainfed Farming	30	70	50	150	2(1+1)
AG 503	Principles of Plant Biotechnology	30	70	50	150	3(2+1)
AG 504	Crop and stored grain pests and their management	30	70	50	150	4(3+1)
AG 505	Breeding of Field and Horticultural Crops	30	70	50	150	3(2+1)
AG 506	Agricultural Marketing, trade and Prices	30	70	50	150	2(1+1)
AG 507	Protected cultivation and Post harvest Technology	30	70	50	150	2(1+1)
AG 508	Diseases of Field Crops and their management	30	70	50	150	3(2+1)
AG 509	Production technology of Spices, Aromatic and Medicinal crops	30	70	50	150	2(1+1)
		240	560	450	1250	

Semester VI

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 601	Practical Crop Production –II (Rabi)	0	0	50	50	1(0+1)
AG 602	Farming Systems, Sustainable Agriculture and Organic Farming	30	70	50	150	3(2+1)
AG 603	Principles of Seed Technology	30	70	50	150	3(2+1)
AG 604	Extension Methodologies for Transfer of Agricultural Technology	30	70	50	150	2(1+1)
AG 605	Livestock Production and Management	30	70	50	150	3(2+1)
AG 606	Environmental Science	30	70	50	150	3(2+1)
AG 607	Post Harvest Management and Value Addition of Fruits and Vegetables	30	70	50	150	3(2+1)
AG 608	Diseases of Horticultural Crops and Their Management	30	70	50	150	2(1+1)
AG 609	Fundamentals of Agri. Business Management	30	70	50	150	2(1+1)
		240	560	450	1250	22

Semester VII

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG C 701	Bio-control Agents and Bio-pesticides	30	70	50	150	3(1+2)
AG C 702	Vermi-composting and Organic farming	30	70	50	150	3(1+2)
AG C 703	Tissue culture and Micro-propagation techniques	30	70	50	150	3(1+2)
AG C 704	Plasticulture in Agriculture	30	70	50	150	3(1+2)
AG C 705	Nursery Management of Horticultural Crops	30	70	50	150	3(1+2)
AG C 706	Commercial Vegetable Production	30	70	50	150	3(1+2)
AG C 707	Commercial Fruit Production	30	70	50	150	3(1+2)
AG C 708	Plant Growth regulators in Agriculture	30	70	50	150	3(1+2)
					1200	18

Semester VIII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
RAWE 421	Rural Agriculture Work Experience	-	-	-	-	
RAWE 421.1	Skill Orientated Training	-	-	800	800	08
RAWE 421.2	Evaluation	-	-	100	100	01
RAWE 421.2.2	Village Attachement Programme	-	-	800	800	08
RAWE 421.2.3	Educational Tour	-	-	200	200	02
**RAWE 421.2.1	Orientation Programme*	-	-	-	-	
**RAWE 421.2.4	Project Report Preparation*	-	-	100	100	01
					2000	20



JAGADGURUKUL
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Faculty of Science

**B.Sc. (Agriculture)
(2016-17)**

Program Structure

Department of Agriculture

B.Sc. (Ag.) Course Structure (2016-17)

Semester I

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 101	Introductory Agriculture and Principles of Agronomy	30	70	50	150	3(2+1)
AG 102	Principles of Genetics	30	70	50	150	3(2+1)
AG 103	Introduction to Soil Science	30	70	50	150	3(2+1)
AG 104	Dimensions of Agricultural Extension	30	70	50	150	2(1+1)
AG 105	Agricultural Microbiology	30	70	50	150	3(2+1)
AG 106	Elementary Mathematics	30	70	0	100	2(2+0)
AG 107	Comprehensive and Communication Skills in English	30	70	50	150	3(2+1)
AG 108	Introduction to Computer Applications	30	70	50	150	2(1+1)
AG 109	NCC/NSS/ Physical Education	-	-	-	-	3(2+1)
		240	560	350	1150	21

Semester II

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 201	Agricultural Meteorology	30	70	50	150	2(1+1)
AG 202	Principles of Plant Breeding	30	70	50	150	3(2+1)
AG 203	Plant Pathogens and Principles of Plant Pathology	30	70	50	150	4(3+1)
AG 204	Insect Morphology and Systematics	30	70	50	150	3(2+1)
AG 205	Principles of Agricultural Economics	30	70	0	100	2(2+0)
AG 206	Fundamentals of Soil and Water Conservation Engineering	30	70	50	150	2(1+1)
AG 207	Biochemistry	30	70	50	150	3(2+1)
AG 208	Soil Chemistry, Soil Fertility and Nutrient Management	30	70	50	150	2(1+1)
		240	560	350	1050	21

Semester III

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 301	Field Crops - I (Kharif)	30	70	50	150	3(2+1)
AG 302	Weed Management	30	70	50	150	2(1+1)
AG 303	Introductory Nematology	30	70	50	150	2(1+1)
AG 304	Statistics	30	70	50	150	3(2+1)
AG 305	Fundamentals of Rural Sociology and Educational Psychology	30	70	0	100	2(2+0)
AG 306	Production Technology of Fruits and Plantation Crops	30	70	50	150	3(2+1)
AG 307	Production Economics and Farm Management	30	70	50	150	2(1+1)
AG 308	Farm Power and Machinery	30	70	50	150	2(1+1)
AG 309	Manures and Fertilizers	30	70	50	150	2(1+1)
		270	630	400	1300	21

Semester IV

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 401	Field Crops- II (Rabi)	30	70	50	150	3(2+1)
AG 402	Water Management	30	70	50	150	2(1+1)
AG 403	Soil Survey, Land Use Planning and Remote Sensing	30	70	50	150	2(1+1)
AG 404	Insect Ecology and Integrated Pest Management including Beneficial Insects	30	70	50	150	3(2+1)
AG 405	Production Technology of Vegetables and Flowers	30	70	50	150	4(3+1)
AG 406	Agricultural Finance and Co-operation	30	70	50	150	2(1+1)
AG 407	Crop Physiology	30	70	50	150	3(2+1)
AG 408	Entrepreneurship Development and Communication Skills	30	70	50	150	2(1+1)
AG 409	NCC/NSS	0	0	100	100	1(0+1)
		240	560	450	1250	22

Semester V

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 501	Practical Crop Production -1(Kharif crops)	0	0	50	50	1(0+1)
AG 502	Rainfed Farming	30	70	50	150	2(1+1)
AG 503	Principles of Plant Biotechnology	30	70	50	150	3(2+1)
AG 504	Crop and stored grain pests and their management	30	70	50	150	4(3+1)
AG 505	Breeding of Field and Horticultural Crops	30	70	50	150	3(2+1)
AG 506	Agricultural Marketing, trade and Prices	30	70	50	150	2(1+1)
AG 507	Protected cultivation and Post harvest Technology	30	70	50	150	2(1+1)
AG 508	Diseases of Field Crops and their management	30	70	50	150	3(2+1)
AG 509	Production technology of Spices, Aromatic and Medicinal crops	30	70	50	150	2(1+1)
		240	560	450	1250	

Semester VI

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 601	Practical Crop Production –II (Rabi)	0	0	50	50	1(0+1)
AG 602	Farming Systems, Sustainable Agriculture and Organic Farming	30	70	50	150	3(2+1)
AG 603	Principles of Seed Technology	30	70	50	150	3(2+1)
AG 604	Extension Methodologies for Transfer of Agricultural Technology	30	70	50	150	2(1+1)
AG 605	Livestock Production and Management	30	70	50	150	3(2+1)
AG 606	Environmental Science	30	70	50	150	3(2+1)
AG 607	Post Harvest Management and Value Addition of Fruits and Vegetables	30	70	50	150	3(2+1)
AG 608	Diseases of Horticultural Crops and Their Management	30	70	50	150	2(1+1)
AG 609	Fundamentals of Agri. Business Management	30	70	50	150	2(1+1)
		240	560	450	1250	22

Semester VII

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG C 701	Bio-control Agents and Bio-pesticides	30	70	50	150	3(1+2)
AG C 702	Vermi-composting and Organic farming	30	70	50	150	3(1+2)
AG C 703	Tissue culture and Micro-propagation techniques	30	70	50	150	3(1+2)
AG C 704	Plasticulture in Agriculture	30	70	50	150	3(1+2)
AG C 705	Nursery Management of Horticultural Crops	30	70	50	150	3(1+2)
AG C 706	Commercial Vegetable Production	30	70	50	150	3(1+2)
AG C 707	Commercial Fruit Production	30	70	50	150	3(1+2)
AG C 708	Plant Growth regulators in Agriculture	30	70	50	150	3(1+2)
					1200	18

Semester VIII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
RAWE 421	Rural Agriculture Work Experience	-	-	-	-	
RAWE 421.1	Skill Orientated Training	-	-	800	800	08
RAWE 421.2	Evaluation	-	-	100	100	01
RAWE 421.2.2	Village Attachement Programme	-	-	800	800	08
RAWE 421.2.3	Educational Tour	-	-	200	200	02
**RAWE 421.2.1	Orientation Programme*	-	-	-	-	
**RAWE 421.2.4	Project Report Preparation*	-	-	100	100	01
					2000	20



JAGADGURUKUL
UNIVERSITY

Faculty of Science

**B.Sc. (Agriculture)
(2017-18)**

Program Structure

Department of Agriculture
B.Sc. (Ag.) Course Structure (2017-18)

Semester I

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 101	Fundamentals of Horticulture	30	50	20	100	2(1+1)
AG 102	Fundamentals of Plant Biochemistry and Biotechnology	30	50	20	100	3(2+1)
AG 103	Fundamentals of Soil Science	30	50	20	100	3(2+1)
AG 104	Introduction to Forestry	30	50	20	100	2(1+1)
AG 105	Comprehension & Communication Skills in English	30	50	20	100	2(1+1)
AG 106	Fundamentals of Agronomy	30	50	20	100	4(3+1)
AG 107A	Introductory Biology	30	50	20	100	2(1+1)
AG 107B	Elementary Mathematics	40	50	10	100	2(2+0)
AG 108	Agricultural Heritage	40	50	10	100	1(1+0)
AG 109	Rural Sociology & Educational Psychology	40	50	10	100	2(2+0)
**AG 110	Human Values and Ethics	-	-	-	-	1(1+0)
**AG 111	NSS/NCC/Physical Education & Yoga Practices	-	-	-	-	2(0+2)
		290/ 300	450	55/60	900	24 (18+3+3)

Semester II

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 201	Fundamentals of Genetics	30	50	20	100	3(2+1)
AG 202	Agricultural Microbiology	30	50	20	100	2(1+1)
AG 203	Introductory Soil and Water Conservation Engineering	30	50	20	100	2(1+1)
AG 204	Fundamentals of Crop Physiology	30	50	20	100	2(1+1)
AG 205	Fundamentals of Agricultural Economics	40	50	10	100	2(2+0)
AG 206	Fundamentals of Plant Pathology	30	50	20	100	4(3+1)
AG 207	Fundamentals of Entomology	30	50	20	100	4(3+1)
AG 208	Fundamentals of Agricultural Extension Education	30	50	20	100	3(2+1)
AG 209	Communication Skills and Personality Development	30	50	20	100	2(1+1)
		280	450	170 (120+50)	900	24

Semester III

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 301	Crop Production Technology-I (Kharif Crops)	30	50	20	100	3(2+1)
AG 302	Fundamentals of Plant Breeding	30	50	20	100	3(2+1)
AG 303	Agricultural Finance and Co-Operation	30	50	20	100	3(2+1)
AG 304	Agricultural Informatics	30	50	20	100	2(1+1)
AG 305	Farm Machinery and Power	30	50	20	100	2(1+1)
AG 306	Production Technology for Vegetables and Spices	30	50	20	100	2(1+1)
AG 307	Environmental Studies and Disaster Management	30	50	20	100	3(2+1)
AG 308	Statistical Methods	30	50	20	100	2(1+1)
AG 309	Livestock and Poultry Management	30	50	20	100	4(3+1)
		270	450	180 (135+45)	900	24

Semester IV

Paper Code	Theory Papers	Internal	External	Practical/ Assignment	Total	Credit
AG 401	Crop Production Technology – II (Rabi crops)	30	50	20	100	3(2+1)
AG 402	Production Technology for Ornamental Crops, MAP and Landscaping	30	50	20	100	2(1+1)
AG 403	Renewable Energy and Green Technology	30	50	20	100	2(1+1)
AG 404	Problematic Soils and their Management	40	50	10	100	2(2+0)
AG 405	Production Technology for Fruit and Plantation Crops	30	50	20	100	2(1+1)
AG 406	Principles of Seed Technology	30	50	20	100	3(1+2)
AG 407	Farming System & Sustainable Agriculture	40	50	10	100	1(1+0)
AG 408	Agricultural Marketing, Trade & Prices	30	50	20	100	3(2+1)
AG 409	Introductory Agrometeorology & Climate change	30	50	20	100	2(1+1)
AG 410A	Protected Cultivation	30	50	20	100	3(2+1)
AG 410B	Agribusiness Management	30	50	20	100	3(2+1)
AG 410C	Agrochemicals	30	50	20	100	3(2+1)
AG 410D	Commercial Plant Breeding	30	50	20	100	3(2+1)
**AG 411	Educational Tour	-	-	-	-	2(0+2)
		320	500	180 (120+60)	1000	25

Semester V

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 501	Principles of Integrated Pest and Disease Management	30	50	20	100	3(2+1)
AG 502	Manures, fertilizers and Soil Fertility Management	30	50	20	100	3(2+1)
AG 503	Pests of Crops and Stored Grains and their Management	30	50	20	100	3(2+1)
AG 504	Diseases of Field and Horticultural Crops and their Management-I	30	50	20	100	3(2+1)
AG 505	Crop Improvement-I (Kharif crops)	30	50	20	100	2(1+1)
AG 506	Entrepreneurship Development and Business Communication	30	50	20	100	2(1+1)
AG 507	Geoinformatics and Nanotechnology and Precision Farming	30	50	20	100	2(1+1)
AG 508	Practical Crop Production- I (Kharif Crops)	0	0	100	100	1(0+1)
AG 509	Intellectual Property Rights	40	50	10	100	1(1+1)
AG 510A	Agricultural Journalism	30	50	20	100	3(2+1)
AG 510B	Landscaping	30	50	20	100	3(2+1)
AG 510C	Food Safety and Standards	30	50	20	100	3(2+1)
AG 510D	Biopesticides & Biofertilizers	30	50	20	100	3(2+1)
		280	450	270 (220+50)	1000	23

Semester VI

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 601	Rainfed Agriculture & Watershed Management	30	50	20	100	2(1+1)
AG 602	Protected Cultivation and Secondary Agriculture	30	50	20	100	2(1+1)
AG 603	Diseases of Field and Horticultural Crops and their Management-II	30	50	20	100	3(2+1)
AG 604	Post-harvest Management and Value Addition of Fruits and Vegetables	30	50	20	100	2(1+1)
AG 605	Management of Beneficial Insects	30	50	20	100	2(1+1)
AG 606	Crop Improvement- II (Rabi Crops)	30	50	20	100	2(1+1)
AG 607	Practical Crop Production- II (Rabi Crops)	0	0	100	100	1(0+1)
AG 608	Principles of Organic Farming	30	50	20	100	2(1+1)
AG 609	Farm Management, Production & Resource Economics	30	50	20	100	2(1+1)
AG 610	Principles of Food Science & Nutrition	40	50	10	100	2(2+0)
AG 611 A	Weed Management	30	50	20	100	3(2+1)
AG 611B	Micro Propagation Technologies	30	50	20	100	3(2+1)
AG 611C	Hi-Tech Horticulture	30	50	20	100	3(2+1)
AG 611D	System Simulation and Agro-Advisory	30	50	20	100	3(2+1)
		310	500	290 (235+55)	1100	23

Semester VII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 701	General Orientation & on campus training by different faculties	0	0	50	50	14
AG 702	Village attachment and Swachh Bharat Abhiyan Activities	0	0	400	400	
AG 703	Unit attachment in University/College. KVK/Research Station	0	0	250	250	
AG 704	Plant Clinic	0	0	100	100	2
AG 705	Agro-Industrial Attachment	0	0	150	150	4
AG 706	Project Report Preparation, Presentation and Evaluation	0	0	50	50	-
		0	0	1000	1000	20

Semester VIII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 801	Production Technology for Bioagents and Biofertilizer	0	0	100	100	0+10
AG 802	Seed Production and Technology	0	0	100	100	0+10
AG 803	Mushroom Cultivation Technology	0	0	100	100	0+10
AG 804	Soil, Plant, Water and Seed Testing	0	0	100	100	0+10
AG 805	Commercial Beekeeping	0	0	100	100	0+10
AG 806	Poultry Production Technology	0	0	100	100	0+10
AG 807	Commercial Horticulture	0	0	100	100	0+10
AG 808	Floriculture and Landscaping	0	0	100	100	0+10
AG 809	Food Processing	0	0	100	100	0+10
AG 810	Agriculture Waste Management	0	0	100	100	0+10
AG 811	Organic Production Technology	0	0	100	100	0+10
AG 812	Commercial Sericulture	0	0	100	100	0+10
AG 813	Agri Business Management	0	0	100	100	0+10
AG 814	Agro-Advisory Services	0	0	100	100	0+10
AG 815	Nursery Management	0	0	100	100	0+10
		0	0	200	200	0+20



JAGADGURUKUL
UNIVERSITY

Faculty of Science

**B.Sc. (Agriculture)
(2018-19)**

Program Structure

Department of Agriculture
B.Sc. (Ag.) Course Structure (2018-19)

Semester I

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 101	Fundamentals of Horticulture	30	50	20	100	2(1+1)
AG 102	Fundamentals of Plant Biochemistry and Biotechnology	30	50	20	100	3(2+1)
AG 103	Fundamentals of Soil Science	30	50	20	100	3(2+1)
AG 104	Introduction to Forestry	30	50	20	100	2(1+1)
AG 105	Comprehension & Communication Skills in English	30	50	20	100	2(1+1)
AG 106	Fundamentals of Agronomy	30	50	20	100	4(3+1)
AG 107A	Introductory Biology	30	50	20	100	2(1+1)
AG 107B	Elementary Mathematics	40	50	10	100	2(2+0)
AG 108	Agricultural Heritage	40	50	10	100	1(1+0)
AG 109	Rural Sociology & Educational Psychology	40	50	10	100	2(2+0)
**AG 110	Human Values and Ethics	!	!	!	!	1(1+0)
**AG 111	NSS/NCC/Physical Education & Yoga Practices	-	-	-	-	2(0+2)
		290/ 300	450	55/60	900	24 (18+3+3)

Semester II

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 201	Fundamentals of Genetics	30	50	20	100	3(2+1)
AG 202	Agricultural Microbiology	30	50	20	100	2(1+1)
AG 203	Introductory Soil and Water Conservation Engineering	30	50	20	100	2(1+1)
AG 204	Fundamentals of Crop Physiology	30	50	20	100	2(1+1)
AG 205	Fundamentals of Agricultural Economics	40	50	10	100	2(2+0)
AG 206	Fundamentals of Plant Pathology	30	50	20	100	4(3+1)
AG 207	Fundamentals of Entomology	30	50	20	100	4(3+1)
AG 208	Fundamentals of Agricultural Extension Education	30	50	20	100	3(2+1)
AG 209	Communication Skills and Personality Development	30	50	20	100	2(1+1)
		280	450	170 (120+50)	900	24

Semester III

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 301	Crop Production Technology-I (Kharif Crops)	30	50	20	100	3(2+1)
AG 302	Fundamentals of Plant Breeding	30	50	20	100	3(2+1)
AG 303	Agricultural Finance and Co-Operation	30	50	20	100	3(2+1)
AG 304	Agricultural Informatics	30	50	20	100	2(1+1)
AG 305	Farm Machinery and Power	30	50	20	100	2(1+1)
AG 306	Production Technology for Vegetables and Spices	30	50	20	100	2(1+1)
AG 307	Environmental Studies and Disaster Management	30	50	20	100	3(2+1)
AG 308	Statistical Methods	30	50	20	100	2(1+1)
AG 309	Livestock and Poultry Management	30	50	20	100	4(3+1)
		270	450	180 (135+45)	900	24

Semester IV

Paper Code	Theory Papers	Internal	External	Practical/ Assignment	Total	Credit
AG 401	Crop Production Technology – II (Rabi crops)	30	50	20	100	3(2+1)
AG 402	Production Technology for Ornamental Crops, MAP and Landscaping	30	50	20	100	2(1+1)
AG 403	Renewable Energy and Green Technology	30	50	20	100	2(1+1)
AG 404	Problematic Soils and their Management	40	50	10	100	2(2+0)
AG 405	Production Technology for Fruit and Plantation Crops	30	50	20	100	2(1+1)
AG 406	Principles of Seed Technology	30	50	20	100	3(1+2)
AG 407	Farming System & Sustainable Agriculture	40	50	10	100	1(1+0)
AG 408	Agricultural Marketing, Trade & Prices	30	50	20	100	3(2+1)
AG 409	Introductory Agrometeorology & Climate change	30	50	20	100	2(1+1)
AG 410A	Protected Cultivation	30	50	20	100	3(2+1)
AG 410B	Agribusiness Management	30	50	20	100	3(2+1)
AG 410C	Agrochemicals	30	50	20	100	3(2+1)
AG 410D	Commercial Plant Breeding	30	50	20	100	3(2+1)
**AG 411	Educational Tour	-	-	-	-	2(0+2)
		320	500	180 (120+60)	1000	25

Semester V

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 501	Principles of Integrated Pest and Disease Management	30	50	20	100	3(2+1)
AG 502	Manures, fertilizers and Soil Fertility Management	30	50	20	100	3(2+1)
AG 503	Pests of Crops and Stored Grains and their Management	30	50	20	100	3(2+1)
AG 504	Diseases of Field and Horticultural Crops and their Management-I	30	50	20	100	3(2+1)
AG 505	Crop Improvement-I (Kharif crops)	30	50	20	100	2(1+1)
AG 506	Entrepreneurship Development and Business Communication	30	50	20	100	2(1+1)
AG 507	Geoinformatics and Nanotechnology and Precision Farming	30	50	20	100	2(1+1)
AG 508	Practical Crop Production- I (Kharif Crops)	0	0	100	100	1(0+1)
AG 509	Intellectual Property Rights	40	50	10	100	1(1+1)
AG 510A	Agricultural Journalism	30	50	20	100	3(2+1)
AG 510B	Landscaping	30	50	20	100	3(2+1)
AG 510C	Food Safety and Standards	30	50	20	100	3(2+1)
AG 510D	Biopesticides & Biofertilizers	30	50	20	100	3(2+1)
		280	450	270 (220+50)	1000	23

Semester VI

Paper Code	Theory Papers	Internal	External	Practical/ Assignment	Total	Credit
AG 601	Rainfed Agriculture & Watershed Management	30	50	20	100	2(1+1)
AG 602	Protected Cultivation and Secondary Agriculture	30	50	20	100	2(1+1)
AG 603	Diseases of Field and Horticultural Crops and their Management-II	30	50	20	100	3(2+1)
AG 604	Post-harvest Management and Value Addition of Fruits and Vegetables	30	50	20	100	2(1+1)
AG 605	Management of Beneficial Insects	30	50	20	100	2(1+1)
AG 606	Crop Improvement- II (Rabi Crops)	30	50	20	100	2(1+1)
AG 607	Practical Crop Production- II (Rabi Crops)	0	0	100	100	1(0+1)
AG 608	Principles of Organic Farming	30	50	20	100	2(1+1)
AG 609	Farm Management, Production & Resource Economics	30	50	20	100	2(1+1)
AG 610	Principles of Food Science & Nutrition	40	50	10	100	2(2+0)
AG 611 A	Weed Management	30	50	20	100	3(2+1)
AG 611B	Micro Propagation Technologies	30	50	20	100	3(2+1)
AG 611C	Hi-Tech Horticulture	30	50	20	100	3(2+1)
AG 611D	System Simulation and Agro-Advisory	30	50	20	100	3(2+1)
		310	500	290 (235+55)	1100	23

Semester VII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 701	General Orientation & on campus training by different faculties	0	0	50	50	14
AG 702	Village attachment and Swachh Bharat Abhiyan Activities	0	0	400	400	
AG 703	Unit attachment in University/College. KVK/Research Station	0	0	250	250	
AG 704	Plant Clinic	0	0	100	100	2
AG 705	Agro-Industrial Attachment	0	0	150	150	4
AG 706	Project Report Preparation, Presentation and Evaluation	0	0	50	50	-
		0	0	1000	1000	20

Semester VIII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 801	Production Technology for Bioagents and Biofertilizer	0	0	100	100	0+10
AG 802	Seed Production and Technology	0	0	100	100	0+10
AG 803	Mushroom Cultivation Technology	0	0	100	100	0+10
AG 804	Soil, Plant, Water and Seed Testing	0	0	100	100	0+10
AG 805	Commercial Beekeeping	0	0	100	100	0+10
AG 806	Poultry Production Technology	0	0	100	100	0+10
AG 807	Commercial Horticulture	0	0	100	100	0+10
AG 808	Floriculture and Landscaping	0	0	100	100	0+10
AG 809	Food Processing	0	0	100	100	0+10
AG 810	Agriculture Waste Management	0	0	100	100	0+10
AG 811	Organic Production Technology	0	0	100	100	0+10
AG 812	Commercial Sericulture	0	0	100	100	0+10
AG 813	Agri Business Management	0	0	100	100	0+10
AG 814	Agro-Advisory Services	0	0	100	100	0+10
AG 815	Nursery Management	0	0	100	100	0+10
		0	0	200	200	0+20



JAGADGURUKUL
UNIVERSITY

Faculty of Science

**B.Sc. (Agriculture)
(2019-20)**

Program Structure

Department of Agriculture
B.Sc. (Ag.) Course Structure (2019-20)

Semester I

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 101	Fundamentals of Horticulture	30	50	20	100	2(1+1)
AG 102	Fundamentals of Plant Biochemistry and Biotechnology	30	50	20	100	3(2+1)
AG 103	Fundamentals of Soil Science	30	50	20	100	3(2+1)
AG 104	Introduction to Forestry	30	50	20	100	2(1+1)
AG 105	Comprehension & Communication Skills in English	30	50	20	100	2(1+1)
AG 106	Fundamentals of Agronomy	30	50	20	100	4(3+1)
AG 107A	Introductory Biology	30	50	20	100	2(1+1)
AG 107B	Elementary Mathematics	40	50	10	100	2(2+0)
AG 108	Agricultural Heritage	40	50	10	100	1(1+0)
AG 109	Rural Sociology & Educational Psychology	40	50	10	100	2(2+0)
**AG 110	Human Values and Ethics	-	-	-	-	1(1+0)
**AG 111	NSS/NCC/Physical Education & Yoga Practices	-	-	-	-	2(0+2)
		290/ 300	450	55/60	900	24 (18+3+3)

Semester II

Paper Code	Theory Papers	Internal	External	Practical / Assignment	Total	Credit
AG 201	Fundamentals of Genetics	30	50	20	100	3(2+1)
AG 202	Agricultural Microbiology	30	50	20	100	2(1+1)
AG 203	Introductory Soil and Water Conservation Engineering	30	50	20	100	2(1+1)
AG 204	Fundamentals of Crop Physiology	30	50	20	100	2(1+1)
AG 205	Fundamentals of Agricultural Economics	40	50	10	100	2(2+0)
AG 206	Fundamentals of Plant Pathology	30	50	20	100	4(3+1)
AG 207	Fundamentals of Entomology	30	50	20	100	4(3+1)
AG 208	Fundamentals of Agricultural Extension Education	30	50	20	100	3(2+1)
AG 209	Communication Skills and Personality Development	30	50	20	100	2(1+1)
		280	450	170 (120+50)	900	24

Semester III

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 301	Crop Production Technology-I (Kharif Crops)	30	50	20	100	3(2+1)
AG 302	Fundamentals of Plant Breeding	30	50	20	100	3(2+1)
AG 303	Agricultural Finance and Co-Operation	30	50	20	100	3(2+1)
AG 304	Agricultural Informatics	30	50	20	100	2(1+1)
AG 305	Farm Machinery and Power	30	50	20	100	2(1+1)
AG 306	Production Technology for Vegetables and Spices	30	50	20	100	2(1+1)
AG 307	Environmental Studies and Disaster Management	30	50	20	100	3(2+1)
AG 308	Statistical Methods	30	50	20	100	2(1+1)
AG 309	Livestock and Poultry Management	30	50	20	100	4(3+1)
		270	450	180 (135+45)	900	24

Semester IV

Paper Code	Theory Papers	Internal	External	Practical/ Assignment	Total	Credit
AG 401	Crop Production Technology – II (Rabi crops)	30	50	20	100	3(2+1)
AG 402	Production Technology for Ornamental Crops, MAP and Landscaping	30	50	20	100	2(1+1)
AG 403	Renewable Energy and Green Technology	30	50	20	100	2(1+1)
AG 404	Problematic Soils and their Management	40	50	10	100	2(2+0)
AG 405	Production Technology for Fruit and Plantation Crops	30	50	20	100	2(1+1)
AG 406	Principles of Seed Technology	30	50	20	100	3(1+2)
AG 407	Farming System & Sustainable Agriculture	40	50	10	100	1(1+0)
AG 408	Agricultural Marketing, Trade & Prices	30	50	20	100	3(2+1)
AG 409	Introductory Agrometeorology & Climate change	30	50	20	100	2(1+1)
AG 410A	Protected Cultivation	30	50	20	100	3(2+1)
AG 410B	Agribusiness Management	30	50	20	100	3(2+1)
AG 410C	Agrochemicals	30	50	20	100	3(2+1)
AG 410D	Commercial Plant Breeding	30	50	20	100	3(2+1)
**AG 411	Educational Tour	-	-	-	-	2(0+2)
		320	500	180 (120+60)	1000	25

Semester V

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 501	Principles of Integrated Pest and Disease Management	30	50	20	100	3(2+1)
AG 502	Manures, fertilizers and Soil Fertility Management	30	50	20	100	3(2+1)
AG 503	Pests of Crops and Stored Grains and their Management	30	50	20	100	3(2+1)
AG 504	Diseases of Field and Horticultural Crops and their Management-I	30	50	20	100	3(2+1)
AG 505	Crop Improvement-I (Kharif crops)	30	50	20	100	2(1+1)
AG 506	Entrepreneurship Development and Business Communication	30	50	20	100	2(1+1)
AG 507	Geoinformatics and Nanotechnology and Precision Farming	30	50	20	100	2(1+1)
AG 508	Practical Crop Production- I (Kharif Crops)	0	0	100	100	1(0+1)
AG 509	Intellectual Property Rights	40	50	10	100	1(1+1)
AG 510A	Agricultural Journalism	30	50	20	100	3(2+1)
AG 510B	Landscaping	30	50	20	100	3(2+1)
AG 510C	Food Safety and Standards	30	50	20	100	3(2+1)
AG 510D	Biopesticides & Biofertilizers	30	50	20	100	3(2+1)
		280	450	270 (220+50)	1000	23

Semester VI

Paper Code	Theory Papers	Internal	External	Practical/ Assignment	Total	Credit
AG 601	Rainfed Agriculture & Watershed Management	30	50	20	100	2(1+1)
AG 602	Protected Cultivation and Secondary Agriculture	30	50	20	100	2(1+1)
AG 603	Diseases of Field and Horticultural Crops and their Management-II	30	50	20	100	3(2+1)
AG 604	Post-harvest Management and Value Addition of Fruits and Vegetables	30	50	20	100	2(1+1)
AG 605	Management of Beneficial Insects	30	50	20	100	2(1+1)
AG 606	Crop Improvement- II (Rabi Crops)	30	50	20	100	2(1+1)
AG 607	Practical Crop Production- II (Rabi Crops)	0	0	100	100	1(0+1)
AG 608	Principles of Organic Farming	30	50	20	100	2(1+1)
AG 609	Farm Management, Production & Resource Economics	30	50	20	100	2(1+1)
AG 610	Principles of Food Science & Nutrition	40	50	10	100	2(2+0)
AG 611 A	Weed Management	30	50	20	100	3(2+1)
AG 611B	Micro Propagation Technologies	30	50	20	100	3(2+1)
AG 611C	Hi-Tech Horticulture	30	50	20	100	3(2+1)
AG 611D	System Simulation and Agro-Advisory	30	50	20	100	3(2+1)
		310	500	290 (235+55)	1100	23

Semester VII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 701	General Orientation & on campus training by different faculties	0	0	50	50	14
AG 702	Village attachment and Swachh Bharat Abhiyan Activities	0	0	400	400	
AG 703	Unit attachment in University/College. KVK/Research Station	0	0	250	250	
AG 704	Plant Clinic	0	0	100	100	2
AG 705	Agro-Industrial Attachment	0	0	150	150	4
AG 706	Project Report Preparation, Presentation and Evaluation	0	0	50	50	-
		0	0	1000	1000	20

Semester VIII

Paper Code	Theory Papers	Internal	External	Practical/Assignment	Total	Credit
AG 801	Production Technology for Bioagents and Biofertilizer	0	0	100	100	0+10
AG 802	Seed Production and Technology	0	0	100	100	0+10
AG 803	Mushroom Cultivation Technology	0	0	100	100	0+10
AG 804	Soil, Plant, Water and Seed Testing	0	0	100	100	0+10
AG 805	Commercial Beekeeping	0	0	100	100	0+10
AG 806	Poultry Production Technology	0	0	100	100	0+10
AG 807	Commercial Horticulture	0	0	100	100	0+10
AG 808	Floriculture and Landscaping	0	0	100	100	0+10
AG 809	Food Processing	0	0	100	100	0+10
AG 810	Agriculture Waste Management	0	0	100	100	0+10
AG 811	Organic Production Technology	0	0	100	100	0+10
AG 812	Commercial Sericulture	0	0	100	100	0+10
AG 813	Agri Business Management	0	0	100	100	0+10
AG 814	Agro-Advisory Services	0	0	100	100	0+10
AG 815	Nursery Management	0	0	100	100	0+10
		0	0	200	200	0+20