

## Academic Program Details:-

The duration of Polytechnic in Agriculture after secondary school certificate examination along with English as compulsory subject is of three years divided into six semesters.

During the six semester, following subjects are offered : (w.e.f. from 2010-2011)

### 1<sup>st</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	General Agriculture	AGRON-111	1	1	2	10	10	40	40	100	10
2	Botany of field crops	PBR-111	2	1	3	10	10	40	40	100	10
3	Economic Botany	PBR-112	1	1	2	10	10	40	40	100	10
4	Agricultural Zoology	ENTO-111	1	1	2	10	10	40	40	100	10
5	English(Comprehension and developing communication skills in english)	ENGL-111	1	1	2	10	10	40	40	100	10
6	Bio Mathematics	MATH-112	1	1	2	10	10	40	40	100	10
7	Principles of Horticulture	HORT-111	1	1	2	10	10	40	40	100	10
8	Fundamentals of Soil science	Ag.CHEM-111	2	1	3	10	10	40	40	100	10

### 2<sup>nd</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Dry land Agriculture and watershed management	AGRON-122	1	1	2	10	10	40	40	100	10
2	Production technology for forage and grasses	AGRON-123	1	0	1	25	25	0	50	100	10
3	Plant nutrition, manures and fertilizers	Ag.CHEM-122	2	1	3	10	10	40	40	100	10
4	Principles of Insect Control	ENTO-123	1	1	2	10	10	40	40	100	10
5	Agricultural engineering, soil survey and soil conservation	AENG-121	2	1	3	10	10	40	40	100	10
6	Principles of Livestock Production and Management	AH-121	1	1	2	10	10	40	40	100	10
7	Principles of Agricultural Economics	Ag.ECO-121	2	0	2	25	25	0	50	100	10
8	Introductory Plant Pathology and Nematology	PI.PATH-121	1	1	2	10	10	40	40	100	10
9	Fundamental of Entomology	ENTO-122	1	1	2	10	10	40	40	100	10

### 3<sup>rd</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Organic farming and farm management	AGRON-215	1	1	2	10	10	40	40	100	10
2	Practical crop production-1 (Cereals and Pulses)	AGRON-216	0	1	1	0	0	100	0	100	10
3	Crop pests and their management	ENTO-214	2	1	3	10	10	40	40	100	10
4	Disease of field and Horticultural crops	PI.PATH-212	1	1	2	10	10	40	40	100	10
5	Dairy Cattle and buffalo production and management	AH-212	1	1	2	10	10	40	40	100	10
6	Introduction to Agricultural Statistics	STAT-211	1	1	2	10	10	40	40	100	10
7	Crop production-1 Kharif	AGRON-214	2	1	3	10	10	40	40	100	10
8	Production technology of fruit crops	HORT-212	1	1	2	10	10	40	40	100	10

### 4<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Water management including Microirrigation	AGRON-228	2	1	3	10	10	40	40	100	10
2	Practical crop production-2 (Oil seeds and commercial crops)	AGRON-229	0	1	1	0	0	100	0	100	10
3	Crop physiology	PBR-223	2	1	3	10	10	40	40	100	10
4	Extention Education	AEXT-221	1	1	2	10	10	40	40	100	10
5	Introduction to Computer	STAT-223	1	2	3	10	10	40	40	100	10
6	Plant diseases management	PI.PATH-223	1	1	2	10	10	40	40	100	10
7	Production technology of Vagatable crops	HORT-223	1	1	2	10	10	40	40	100	10
8	Crop production-2 Rabi	AGRON-227	2	1	3	10	10	40	40	100	10

## 5<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Weed Management	AGRON-3110	1	1	2	10	10	40	40	100	10
2	Farming System and Sustainable Agriculture	AGRON-3111	1	1	2	10	10	40	40	100	10
3	Genetics and Plant Breeding	PBR-314	2	1	3	10	10	40	40	100	10
4	Agricultural Microbiology	Ag.MICRO-314	1	1	2	10	10	40	40	100	10
5	Post Harvest Technology	AENG-312	1	1	2	10	10	40	40	100	10
6	Live stock trade, Fish and Poultry Marketing	AH-313	1	1	2	10	10	40	40	100	10
7	Fundamental of Agribusiness Management	Ag.ECO-312	1	1	2	10	10	40	40	100	10
8	Entrepreneurship Development	EXT-312	1	1	2	10	10	40	40	100	10
9	Production technology of Flowers crops and Gardening	HORT-314	1	1	2	10	10	40	40	100	10

## 6<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Vermi compost	AGRON-3212	0	4	4	0	0	100	0	100	10
2	Seed production technology	PBR-325	0	4	4	0	0	100	0	100	10
3	Mushroom production technology	PI.PATH-325	0	4	4	0	0	100	0	100	10
4	Preservation and value addition in Horticultural Crops	HORT-325	0	4	4	0	0	100	0	100	10
5	Green house technology	HORT-326	0	4	4	0	0	100	0	100	10

The duration of Polytechnic in Agriculture after secondary school certificate examination along with English as compulsory subject is of three years divided into six semesters.

During the six semester, following subjects are offered : (w.e.f. from 2013-2014)

**1<sup>st</sup> Semester**

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Introductory Agriculture and Principles of Agronomy	Agron. 1.1	1	1	2	10	10	40	40	100	10
2	Field Crop Production -I (kharif)	Agron. 1.2	2	1	3	10	10	40	40	100	10
3	Fundamentals of Soil Science	Ag. Chem. 1.1	2	1	3	10	10	40	40	100	10
4	Fundamentals of Entomology	Ag. Ento. 1.1	1	1	2	10	10	40	40	100	10
5	Economic Botany	PBG 1.1	2	1	3	10	10	40	40	100	10
6	Principles of Horticulture	Hort. 1.1	1	1	2	10	10	40	40	100	10
7	Comprehension and Communication Skills in English	Eng. 1.1	1	1	2	10	10	40	40	100	10
8	NSS/NCC/Physical Education (Non credit course)	P.E. 1.1	0	1*	1	0	0	0	0	100	S

**2<sup>nd</sup> Semester**

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Crop Production -II (Rabi)	Agron. 2.3	2	1	3	10	10	40	40	100	10
2	Soil chemistry, soil fertility and nutrient management	Ag. Chem. 2.2	2	1	3	10	10	40	40	100	10
3	Principles of Insect control	Ag. Ento. 2.2	1	1	2	10	10	40	40	100	10
4	Introductory Plant Pathology and Nematology	Pl. Path. 2.1	2	1	3	10	10	40	40	100	10
5	Principles of Live stock & Poultry Production	LPM -2.1	1	1	2	10	10	40	40	100	10
6	Fundamentals of Agricultural Engineering	Ag. Engg. 2.1	1	1	2	10	10	40	40	100	10
7	Principles of Agricultural Economics	Ag. Eco. 2.1	2	0	2	25	25	0	50	100	10
8	Agricultural meteorology	Ag. Met. 2.1	2	1	3	10	10	40	40	100	10

### 3<sup>rd</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Organic Farming and Sustainable Agriculture	Agron. 3.4	1	1	2	10	10	40	40	100	10
2	Practical Crop Production (Kharif crops) Plant nutrition, manures and fertilizers	Agron. 3.5	0	1	1	0	0	100	0	100	10
3		Ag. Chem. 3.3	2	1	3	10	10	40	40	100	10
4	Principles of genetics	PBG 3.2	2	1	3	10	10	40	40	100	10
5	Pests of field crops and their management	Ag. Ento. 3.3	1	1	2	10	10	40	40	100	10
6	Diseases of field crops and their management Dairy Cattle and Buffalo Production & Management	Pl. Path. 3.2	1	1	2	10	10	40	40	100	10
7		LPM 3.2	2	1	3	10	10	40	40	100	10
8	Production technology of fruit crops	Hort.3.2	1	1	2	10	10	40	40	100	10

### 4<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Water Management	Agron. 4.6	2	1	3	10	10	40	40	100	10
2	Weed management	Agron. 4.7	1	1	2	10	10	40	40	100	10
3	Diseases of fruits and vegetable crops and their management Crop Physiology	Pl.Path.4.3	1	1	2	10	10	40	40	100	10
4		Pl. Phy. 4.1	1	1	2	10	10	40	40	100	10
5	Pests of fruit and vegetable crops and their management	Ag. Ento. 4.4	1	1	2	10	10	40	40	100	10
6	Production Technology of Vegetable Crops	Hort. 4.3	1	1	2	10	10	40	40	100	10
7	Post harvest technology	Ag. Engg. 4.2	1	1	2	10	10	40	40	100	10
8	Introduction to computer application	Ag. Stat. 4.1	1	2	3	10	10	40	40	100	10

## 5<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Farming Systems and farm management	Agron. 5.8	1	1	2	10	10	40	40	100	10
2	Fundamentals of Extension Education and communication	Ag. Extn.5.1	2	1	3	10	10	40	40	100	10
3	Agriculture statistics	Ag. Stat. 5.2	1	1	2	10	10	40	40	100	10
4	Production Technology of Flower Crops and Gardening	Hort. 5.4	1	1	2	10	10	40	40	100	10
5	Introductory Plant Breeding	PBG 5.3	2	1	3	10	10	40	40	100	10
6	Agricultural Microbiology _Microbiology	Ag. Micro. 5.1	1	1	2	10	10	40	40	100	10
7	Fundamentals of soil water conservation and engineering	Ag. Engg. 5.3	2	1	3	10	10	40	40	100	10

## 6<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Seed Production Technology	PBG 6.4	0	4	4	0	0	100	0	100	10
2	Preservation and Value Addition in Horticultural Crops	Hort. 6.5	0	4	4	0	0	100	0	100	10
3	Mushroom Production Technology	P1.Path. 6.4	0	4	4	0	0	100	0	100	10
4	Green House Technology	Hort. 6.6	0	4	4	0	0	100	0	100	10
5	Vermicompost	Agron. 6.9	0	4	4	0	0	100	0	100	10
6	Educational Tour*	-	-	-	4	0	0	100	0	100	S

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During the six semester, following subjects are offered : (w.e.f. from 2014-2015)

**1<sup>st</sup> Semester**

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Introductory Agriculture and Principles of Agronomy	Agron. 1.1	2	1	3	10	10	40	40	100	10
2	Field Crops-I ( <i>kharif</i> )	Agron. 1.2	2	1	3	10	10	40	40	100	10
3	Introduction to Soil Science	Ag. Chem. 1.1	2	1	3	10	10	40	40	100	10
4	Introductory Plant Pathology	Pl. Path. 1.1	1	1	2	10	10	40	40	100	10
5	Economic Botany	PBG 1.1	1	1	2	10	10	40	40	100	10
	Biomathematics	Maths 1.1	2	0	2	25	25	0	50	100	10
6	Comprehension and Communication Skills in English	Eng. 1.1	1	1	2	10	10	40	40	100	10
7	NSS/NCC/Physical Education (Non credit course)	P.E. 1.1	0	1	1	0	0	0	0	100	S

**2<sup>nd</sup> Semester**

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Principles of Agricultural Economics	Ag. Eco. 2.1	2	0	2	25	25	0	50	100	10
	Fundamentals of soil water conservation and engineering	Ag. Engg. 2.1	2	1	3	10	10	40	40	100	10
2	Fundamentals of Entomology	Ag. Ento. 2.1	1	1	2	10	10	40	40	100	10
3	Soil chemistry, soil fertility and nutrient management	Ag. Chem. 2.2	2	1	3	10	10	40	40	100	10
4	Field crops -II (Rabi)	Agron. 2.3	2	1	3	10	10	40	40	100	10
5	Agricultural meteorology	Ag. Met. 2.1	2	1	2	10	10	40	40	100	10
6	NSS/NCC/Physical Education (Non credit course)	P.E. 2.2	0	1	1	0	0	0	0	100	S

### 3<sup>rd</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Organic Farming and Sustainable Agriculture	Agron. 3.4	1	1	2	10	10	40	40	100	10
2	Practical Crop Production (Kharif crops) Plant nutrition, manures and fertilizers	Agron. 3.5	0	1	1	0	0	100	0	100	10
		Ag. Chem. 3.3	2	1	3	10	10	40	40	100	10
3	Principles of genetics	PBG 3.2	2	1	3	10	10	40	40	100	10
4	Principles of Insect control	Ag. Ento. 3.2	1	1	2	10	10	40	40	100	10
5	Diseases of field crops and their management Principles of Live stock & Poultry Production	Pl. Path. 3.2	1	1	2	10	10	40	40	100	10
		LPM -3.1	1	1	2	10	10	40	40	100	10
6	Production technology of fruit crops	Hort. 3.1	2	1	3	10	10	40	40	100	10
7	NSS/NCC/Physical Education (Non credit course)	P.E. 3.3	0	1	1	0	0	0	0	100	S

### 4<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Water Management	Agron. 4.6	2	1	3	10	10	40	40	100	10
2	Weed management	Agron. 4.7	1	1	2	10	10	40	40	100	10
3	Diseases of fruits and vegetable crops and their management Crop Physiology	P1.Path.4.3	1	1	2	10	10	40	40	100	10
		Pl. Phy. 4.1	1	1	2	10	10	40	40	100	10
5	Pests of field crops and their management	Ag. Ento. 4.3	1	1	2	10	10	40	40	100	10
6	Production Technology of Vegetable Crops	Hort. 4.3	1	1	2	10	10	40	40	100	10
7	Post harvest technology	Ag. Engg. 4.2	1	1	2	10	10	40	40	100	10
8	Introduction to computer application	Ag. Stat. 4.1	1	1	2	10	10	40	40	100	10



9	NSS/NCC/Physical Education (Non credit course)	P.E. 4.4	0	1	1	0	0	0	0	100	S
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### 5<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Farming Systems and farm management	Agron. 5.8	1	1	2	10	10	40	40	100	10
2	Fundamentals of Extension Education and communication Agriculture statistics	Ag. Extn.5.1	2	1	3	10	10	40	40	100	10
		Ag. Stat. 5.2	2	1	3	10	10	40	40	100	10
3	Production Technology of Flower Crops and Gardening	Hort. 5.4	1	1	2	10	10	40	40	100	10
4	Introductory Plant Breeding	PBG 5.3	2	1	3	10	10	40	40	100	10
5	Agricultural Microbiology	Ag. Micro. 5.1	2	1	3	10	10	40	40	100	10
6	Dairy Cattle and Buffalo Production & Management	LPM 5.2	2	1	3	10	10	40	40	100	10
7	Pests of fruit and vegetable crops and their management	Ag. Ento. 5.4	1	1	2	10	10	40	40	100	10

### 6<sup>th</sup> Semester

Sr. No.	Name of Subject	Subject Course	Credit Hours			Evaluation Scheme				Total Marks	Grade Point
			Theory	Practical	Total	Internal			External		
						1st hr. Test	2nd hr. Test	Practical	Sem. End		
1	Seed Production Technology	PBG 6.4	0	4	4	0	0	100	0	100	10
2	Preservation and Value Addition in Horticultural Crops	Hort. 6.5	0	4	4	0	0	100	0	100	10
3	Mushroom Production Technology	P1.Path. 6.4	0	4	4	0	0	100	0	100	10
4	Green House Technology	Hort. 6.6	0	4	4	0	0	100	0	100	10
5	Vermicompost	Agron. 6.9	0	4	4	0	0	100	0	100	10



