

New syllabus B. Sc. (Horti.) degree programme
Semesterwise list of courses of B. Sc. (Hort.)

SEMESTER –I

Sr. No.	Course No.	Course title	Credits
1	H/HORT-111	Fundamentals of Horticulture	2+1=3
2	H/FLOR-111	Ornamental Horticulture	1+1=2
3	H/SSAC-111	Fundamental of Soil Science	1+1=2
4	H/BOT-111	Principles of Genetics and Cytogenetics	2+1=3
5	H/EXTN-111	Fundamentals of Extension Education	1+1=2
6	H/ECON-111	Introductory Economics	2+0=2
7	H/AGROMET-111	Agriculture Meteorology	1+1=2
8	H/COMP-111	Computer Application	1+1=2
9	H/MIBO-111	Introductory Microbiology	1+1=2
		Total credits	12+8=20
10	H/LANG-111	Structural Grammar and Spoken English	1+1 (NC)
11	PHY. EDN-111	Physical Education	0+1 (NC)
12	H/MATH-111	Mathematics	1+1 (DC)

SEMESTER –II

Sr. No.	Course No.	Course title	Credits
1	H/HORT-122	Propagation and Nursery Management	2+1=3
2	H/HORT-125	Growth and Development of Horticultural Crops	1+1=2
3	H/SSAC-122	Nutrient Management in Horticultural Crops	2+1=3
4	H/AGRO-124	Water Management in Horticultural Crops	1+1=2
5	H/BOT-122	Principles of Plant Breeding	1+1=2
6	H/BOT-123	Introductory Plant Physiology	1+1=2
7	H/PATH-121	Fundamentals of Plant Pathology	1+1=2
8	H/ENTO-121	Fundamentals of Entomology	1+1=2
9	H/STAT-121	Elementary Statistics	1+1=2
10	H/EXTN-122	Agricultural Communication & Journalism	0+1=1
		Total	11+10=21
11	NSS-122	National Service Scheme	NC

Semester –III

Sr. No.	Course No.	Course title	Credits
1	H/FRT-231	Tropical & Subtropical Fruits	2+1=3
2	H/VEG-231	Tropical and Sub-tropical Vegetables	2+1=3
3	H/PHT-231	Post harvest Management of Horticultural Crops	2+1=3
4	H/SPICON-231	Spices and Condiments	1+1=2
5	H/FLOR-232	Landscape Gardening	1+1=2
6	H/AGRO-236	Weed Management in Horticultural Crops	1+1=2
7	H/PATH-232	Diseases of Vegetables and Spice Crops	2+1=3
8	H/SSAC-233	Fundamentals of Biochemistry	1+1=2
		Total	12+8=20

Semester –IV

Sr. No.	Course No.	Course title	Credits
1	H/FRT-242	Breeding of Fruit and Plantation Crops	2+1=3
2	H/FRT-243	Arid Fruit Crops	1+1=2
3	H/VEG-242	Temperate Vegetables	1+1=2
4	H/FLOR-243	Commercial Floriculture	2+1=3
5	H/AGRO-247	Organic Farming in Horticultural Crops	1+1=2
6	H/PATH-243	Diseases of Fruit, Plantation, Medicinal and Aromatic Crops	2+1=3
7	H/BOT-244	Aromatic and Medicinal Plants	1+1=2
8	H/SSAC-244	Soil, Irrigation Water and Plant Analysis	0+1=1
9	H/ECON-242	Horti-Business Management	2+0=2
		Total	12+8=

Semester –V

Sr. No.	Course No.	Course title	Credits
1	H/VEG-353	Breeding of Vegetable Crops	2+1=3
2	H/FRT-354	Temperate Fruits & Plantation Crops	2+1=3
3	H/HORT-358	Introductory Agroforestry and Hort-silvipature	1+1=2
4	H/FLOR-354	Protected Cultivation of Flower Crops	1+1=2
5	H/BOT-354	Environmental Science and Agroecology	1+1=2
6	H/ENTO-352	Inset Pest Management of Fruit, Plantation, Medicinal and Aromatic Crops	2+1=3
7	H/ENTO-353	Inset Pest Management of Vegetable, Ornamental and Spices Crops	2+1=3
8	H/PATH-354	Mushroom Culture	0+1=1
9	H/AGRIL-ENGG-351	Farm Power and Machinery	1+1=2
		Total	12+9=21

Semester –VI

Sr. No.	Course No.	Course title	Credits
1	H/FLOR-365	Breeding and Seed Production of Ornamental Crops	1+1=2
2	H/VEG-364	Seed Production in Vegetable Crops	2+1=3
3	H/VEG-365	Protected Cultivation of Vegetable Crops	1+1=2
4	H/PHT-362	Processing and Value Addition of Horticultural Crops	1+2=3
5	H/BIOT-361	Fundamentals of Biotechnology	1+1=2
6	H/ENTO-364	Nematode Pests of Horticultural Crops and Their Management	1+1=2
7	H/ENTO-365	Apiculture	0+1=1
8	H/EXTN-363	Entrepreneurship Development and Communication Skills	1+1=2
9	H/MIBO-362	Applied Microbiology	0+1=1
		Total	8+10=18

Grand total of Six semesters

67+53=120

**DIVISIONWISE CREDIT LOAD OF
B. SC. (HORT.) DEGREE PROGRAMME**

Division of Fruit Science

Sr. No.	Course No.	Course title	Credits
1	H/FRT-231	Tropical and Subtropical Fruits	2+1
2	H/FRT-242	Breeding of fruit and plantation Crops	2+1
3	H/FRT-243	Arid Fruit Crops	1+1
4	H/FRT-354	Temperate and Plantation Fruit Crops	2+1
5	H/HORT-111	Fundamentals of Horticulture	2+1
6	H/HORT-122	Plant Propagation and Nursery Management	2+1
		Total	11+6=17

Division of Vegetable Science

Sr. No.	Course No.	Course title	Credits
1	H/VEG-231	Tropical and Subtropical Vegetable Crops	2+1
2	H/VEG-242	Temperate Vegetable Crops	1+1
3	H/VEG-353	Breeding of Vegetable Crops	2+1
4	H/VEG-364	Seed Production of Vegetable Crops	2+1
5	H/VEG-365	Protected Cultivation of Vegetable Crops	1+1

6	H/SPICON-231	Spices and Condiments	1+1
		Total	9+6=15

Division of Ornamental Horticulture & Landscape Gardening

Sr. No.	Course No.	Course title	Credits
1	H/FLOR-111	Ornamental Horticulture	1+1
2	H/FLOR-232	Landscape Gardening	1+1
3	H/FLOR-243	Commercial Floriculture	2+1
4	H/FLOR-354	Protected Cultivation of Flower Crops	1+1
5	H/FLOR-365	Breeding and Seed Production of Ornamental Plants	1+1
		Total	6+5=11

Division of Post Harvest Technology

Sr. No.	Course No.	Course title	Credits
1	H/PHT-231	Post Harvest Management of Horticultural Crops	2+1
2	H/PHT-362	Processing and Value Addition of Horticultural Crops	1+2
		Total	3+3=6

Division of Plant Protection

Sr. No.	Course No.	Course title	Credits
1	H/PATH-121	Fundamentals of Plant Pathology	1+1
2	H/PATH-232	Diseases of Vegetable, Ornamental and Spice Crops	2+1
3	H/PATH-242	Diseases of Fruits, Plantation, Aromatic and Medicinal Crops	2+1
4	H/PATH-354	Mushroom Culture	0+1
5	H/MIBO-111	Introductory Microbiology	1+1
6	H/MIBO-362	Applied Microbiology	0+1
7	H/ENTO-121	Fundamentals of Entomology	1+1
8	H/ENTO-352	Insect Pest Management of Fruit, Plantation, Medicinal and Aromatic Plants	2+1
9	H/ENTO-353	Inst Pest Management of Vegetable, Ornamental and Spice Crops	2+1
10	H/ENTO-364	Nematode Pests of Horticultural Crops & Their Management	1+1
11	H/ENTO-365	Apiculture	0+1
		Total	12+11=23

Division of Natural Resource Management

Sr. No.	Course No.	Course title	Credits
1	H/SSAC-111	Fundamentals of Soil Science	1+1
2	H/SSAC-244	Soil, Irrigation Water and Plant Analysis	0+1
3	H/SSAC-232	Fundamentals of Bio-chemistry	1+1
4	H/SSAC-122	Soil Fertility and Nutrient Management of Horticultural Crops	2+1
5	H/BOT-355	Environmental Science and Agro-ecology	1+1
6	H/AGRO-124	Water Management of Horticultural Crops	1+1
7	H/AGRO-236	Weed Management in Horticultural Crops	1+1
8	H/AGRO-247	Organic Farming in Horticultural Crops	1+1
9	H/AGROMET-111	Agriculture Meteorology	1+1
10	H/ENGG351	Farm Power and Machinery	1+1
		Total	10+10=20

Division of Basic Science & Humanities

Sr. No.	Course No.	Course title	Credits
1	H/HORT-125	Growth and Development of Horticultural Crops	1+1
2	H/HORT-358	Introductory Agroforestry and Horti-silvipasture	1+1
3	H/BIOT-361	Fundamentals of Bio-technology	1+1
4	H/BOT-111	Principles of Genetics and Cytogenetics	2+1
5	H/BOT-122	Principles of Plant Breeding	1+1
6	H/BOT-123	Introductory Plant Physiology	1+1
7	H/BOT-244	Aromatic and Medicinal Crops	1+1
8	H/EXTN-111	Fundamentals of Extension Education	1+1
9	H/EXTN-122	Agril. Communication and Journalism	0+1
10	H/EXTN-363	Entrepreneurship Development and Communication Skills	1+1
11	H/ECON-232	Horti-Business Management	2+0
12	H/ECON-111	Introductory Economics	2+0
13	H/STAT-121	Elementary Statistics	1+1
14	H/COMP-111	Computer Application	1+1
		Total	16+12=28
15	H/LAN-111	Structural Grammar and Spoken English	1+1 (NC)
16	PH.EDN-111	Physical Education	0+1 (NC)
17	H/MATH-111	Mathematics	1+1 (DC)
18	NSS-122	National Service Scheme	NC

Division wise credit load

Sr. No.	Divisions Credits	
1	Division of Fruit Science	$11+6=17$
2	Division of Vegetable Science	$9+6=15$
3	Division of Ornamental Horticulture & Landscape Gardening	$6+5=11$
4	Division of Post Harvest Technology	$3+3=6$
5	Division of Plant Protection	$12+11=23$
6	Division of Natural Resource Management	$10+10=20$
7	Division of Basic Science and Humanities	$16+12=28$
	TOTAL	$67+53=120$

Total credits during degree programme

1	Credit courses upto sixth semester	$67+53=120$
2	Hands on Training	$5+10=15$
3	Hands on Training	$5+10=15$

4	Report Writing	$0+4=04$
5	Total credits for 4 years	$77+77=154$

ODD AND EVEN SEMESTERWISE COURSES FOR B. SC. (HORT.)

I) Division of Fruit Science

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/HORT-111	Fundamentals of Horticulture	2+1	H/HORT-122	Plant Propagation and Nursery Management	2+1
2				H/HORT-125	Growth and Development of Horticultural Crops	1+1
	III rd semester			IV th semester		
3	H/FRT-231	Tropical and Subtropical Fruits	2+1	H/FRT-242	Breeding of fruit & plantation Crops	2+1
				H/FRT-243	Arid Fruit Crops	1+1
	V th Semester			VI th Semester		
4	H/FRT-354	Temperate fruit and Plantation Crops	2+1			
5	H/HORT-358	Introductory Agroforestry and Horti-Silvipasture	1+1			
		Total	7+4=11		Total	6+4=10
	VII th Semester			VIII th Semester		
6	H/HORT-	Experimental learning	5+10= 15	H/HORT-	Experimental learning	5+10= 15

II) Division of Vegetable Science

Sr. No.	Odd semesters			Even semesters		
	III rd semester			IV th semester		
1	H/VEG-231	Tropical and Subtropical Vegetables	2+1	H/VEG-242	Temperate Vegetables	1+1
2	H/SPICON-231	Spices and Condiments	1+1			
	V th Semester			VI th Semester		
3	H/VEG-353	Breeding of Vegetable Crops	2+1	H/VEG-364	Seed Production of Vegetable Crops	2+1
				H/VEG-365	Protected Cultivation of Vegetable Crops	1+1
		Total	5+3=8		Total	4+3=7
	VII th Semester			VIII th Semester		
4	H/HORT-	Experimental learning	5+10= 15	H/HORT-	Experimental learning	5+10= 15

III) Division of Floriculture

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/FLOR-111	Ornamental Horticulture	1+1			
	III rd semester			IV th semester		
2	H/FLOR-232	Landscape Gardening	1+1	H/FLOR-243	Commercial Floriculture	2+1
	V th Semester			VI th Semester		
3	H/FLOR-354	Protected Cultivation of Flower Crops	1+1	H/FLOR-365	Breeding and Seed Production of Ornamental Plants	1+1
		Total	3+3=6		Total	3+2=5
	VII th Semester			VIII th Semester		
4	H/HORT-	Experimental learning	5+10= 15	H/HORT-	Experimental learning	5+10= 15

IV) Division of Post Harvest Technology

Sr. No.	Odd semesters			Even semesters		
	III rd semester			IV th semester		
1	H/PHT-231	Post Harvest Management of Horticultural Crops	2+1			
	V th Semester			VI th Semester		
2				H/PHT-362	Processing and Value Addition of Horticultural Crops	1+2
		Total	2+1=3		Total	1+2=3
	VII th Semester			VIII th Semester		
5	H/HORT-	Experimental learning	5+10= 15	H/HORT-	Experimental learning	5+10= 15

V) Division of Natural Resources Management

1. Agronomy & Agril. Meteorology

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/AGROMET-111	Agriculture Meteorology	1+1	H/AGRO-124	Water Management in Horticultural Crops	1+1
	III rd semester			IV th semester		
2	H/AGRO-236	Weed Management in Horticultural Crops	1+1	H/AGRO-247	Organic Farming in Horticultural Crops	1+1
		Total	2+2=4		Total	2+2=4

2. Soil Science & Chemistry in Horticulture

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/SSAC-111	Fundamentals of Soil Science	1+1	H/SSAC-122	Soil Fertility and Nutrient Management in Horticultural Crops	2+1
	III rd semester			IV th semester		
2	H/SSAC-233	Fundamentals of Biochemistry	1+1	H/SSAC-244	Soil, Irrigation Water and Plant Analysis	0+1
		Total	2+2=4		Total	2+2=4

3. Engineering in Horticulture

Sr. No.	Odd semesters			Even semesters		
	V th Semester			VI th Semester		
3	H/AGRIL-ENGG-351	Farm Power and Machinery	1+1			

		Total	1+1=2		Total	
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VI) Division of Plant Protection

1. Plant Pathology & Microbiology in Horticulture

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/MIBO-111	Introductory Microbiology	1+1	H/PATH-121	Fundamentals of Plant Pathology	1+1
	III rd semester			IV th semester		
2	H/PATH-232	Diseases of Vegetable, Ornamental and Spice Crops	2+1	H/PATH-243	Diseases of Fruit, Plantation, Medicinal and Aromatic Crops	2+1
	V th Semester			VI th Semester		
3	H/PATH-354	Mushroom Culture	0+1	H/MIBO-362	Applied Microbiology	0+1
		Total	3+3=6		Total	3+3=6

2. Entomology

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1				H/ENTO-121	Fundamentals of Entomology	1+1
	V th Semester			VI th Semester		
3	H/ENTO-352	Insect Pest Management of Fruit, Plantation and Aromatic Plants	2+1	H/ENTO-364	Nematode Pests of Horticultural Crops & their Management	1+1
	H/ENTO-353	Inst Pest Management of Vegetable, Ornamental and Spice Crops	2+1	H/ENTO-365	Apiculture	0+1
		Total	4+2=6		Total	2+3=5

VII) Division of Basic Sciences

1. Botany

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/BOT-111	Principles of Genetics and Cytogenetics	2+1	H/BOT-122	Principles of Plant Breeding	1+1
2				H/BOT-123	Introductory Crop Physiology	1+1
	III rd semester			IV th semester		
3				H/BOT-244	Aromatic and Medicinal Plants	1+1
	V th Semester			VI th Semester		
4	H/BOT-354	Environmental Science and Agroecology	1+1	H/BIOT-361	Fundamentals of Biotechnology	1+1
		Total	3+2=5		Total	4+4=8

2. Economics

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/ECON-111	Introductory Economics	2+0			
	III rd semester			IV th semester		
2				H/ECON-242	Horti-Business Management	2+0
		Total	2+0=2			2+0=2

3. Extension

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/EXTN-111	Fundamentals of Extension Education	1+1	H/EXTN-122	Agriculture Communication and Journalism	0+1
2	H/LANG-111	Structural Grammar and Spoken English	1+1 (NC)			
	V th Semester			VI th Semester		
3				H/EXTN-363	Entrepreneurship Development and Communication Skills	1+1
		Total	2+2=4		Total	1+2=3

4. Statistics

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	H/COMP-111	Computer Application	1+1	H/STAT-121	Elementary Statistics	1+1
2	H/MATH-111	Mathematics	1+1 (DC)			
		Total	2+2=4		Total	1+1=2

5. Physical education

Sr. No.	Odd semesters			Even semesters		
	I st semester			II nd semester		
1	PHY.EDN-111	Physical Education	0+1 (NC)			
		Total	0+1=1 (NC)			

Total credits for B. Sc. (Hort.) : 67+53=120

Total credits for odd semester : 37+25=62

Total credits for even semester : 30+28=58