

## Syllabus for B.Sc. (Hons) Agriculture Year – II (Sem. IV)

**Subject Code:** 16AS1511

**Subject Short Name:** Hort. 5.4

**Subject Name:** Ornamental Crops, MAPs and Landscaping

### Objective:

1. To educate in detail about origin, area, climate, soil, improved varieties production technology of flowers and MAPs
2. To educate about concept, designing principles and components of landscaping
3. To educate about the physiological disorders of commercial flowers
4. To educate about the post-harvest management and value addition in flower crops and MAP

**Credits Earned:** 2 Credits (1+1)

**Course Outcomes:** After completion of this course, Students will be able to

- Learn about importance of ornamental crops, MAP and landscaping.
- Identify various ornamental, medicinal and aromatic plants.
- Apply the knowledge of cultivation techniques for planting of ornamental, medicinal and aromatic plants.
- Justify the importance of value addition in flower crop or MAP.
- Able to prepare project report on cultivation of high value flower crop or MAP.

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE (E)	Mid Sem. (M)	Progressive Assessment (PA)	Viva (V)	Term work (TW)	
1	0	2	2	40	20	20	10	10	100

### Theory Content:

Unit	Topics	Contact Hours
1	Importance and scope of medicinal and aromatic plants and Landscaping	<b>1</b>
2	Production Technology of Ashwagandha, Costus, Isabgol, Geranium	<b>1</b>
3	Production Technology of Mint, Aloe, Ocimum, Periwinkle	<b>1</b>

4	Production Technology of Lemongrass, Citronella, Vetiver, Palmarosa	<b>1</b>
5	Production Technology of Rose, Gerbera and Orchids	<b>1</b>
6	Production Technology of Gladiolus and Tuberose	<b>1</b>
7	Production Technology of special flower crops	<b>2</b>
8	Production Technology of loose flower crops	<b>1</b>
9	Lawn management	<b>1</b>
10	Flower Arrangement	<b>1</b>
11	Principles of Landscaping	<b>1</b>
12	Bonsai	<b>1</b>
13	Processing and Value addition of MAPs produce	<b>2</b>
	<b>Total</b>	<b>15</b>

**Practical Content:**

<b>Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	Identification of MAPs and Ornamental plants	<b>2</b>
2	Propagation of seasonal ornamental and MAPs	<b>2</b>
3	Propagation methods of high valued flower crops	<b>2</b>
4	Nursery raising techniques in vegetables and spices	<b>2</b>
5	Establishment and maintenance of lawn	<b>2</b>
6	Preparation of flower preservatives	<b>2</b>
7	Training and Pruning	<b>2</b>
8	Layout and Planning of garden	<b>2</b>
9	Eastern and Western style flower arrangement	<b>2</b>
	<b>Total</b>	<b>18</b>

### Reference Books:

- Floriculture in India, Floriculture in India, G. S. Randhawa and A. Mukopadhyay, Allied Publishers , 1998
- Introduction to spices, plantation crops, medicinal and aromatic plants, N. kumar, Abdul Khadder, P. Rangaswamy and I. Irulappam, Scientific International Pvt. Ltd., 2023
- Text Book of Floriculture and Land scaping, Text Book of Floriculture and Land scaping, N. Roychowdhury and H.P. Mishra, Allied Publishers, 2000
- Commercial Flowers, T. K. Bose, Astral Publications, 2021

### Suggested Theory distribution:

The suggested theory distribution as per Bloom’s taxonomy is as per follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process.

Distribution of Theory for course delivery and evaluation					
Remember	Understand	Apply	Analyze	Evaluate	Create
25%	25%	20%	10%	10%	10%

### Instructional Method:

1. The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by white board may also use any of tools such as demonstration, role play, quiz, brain storming, MOOCs etc.
2. The internal evaluation will be done on the basis of continuous evaluation of students in the class-rooms.
3. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory/ field.
4. Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory.