DEVA MATHA COLLEGE KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



SYLLABUS

OF

ADD-ON COURSE

IN

Horticulture Applications

Academic Year: 2022-23



Title : Horticulture Applications

Instructional Hours : 30 hrs

Duration : 3 Months

Mode of Instruction : Offline

Intake Capacity : One Batch [25 Students]

Eligibility : +2

DEVA MATHA COLLEGE KURAVILANGAD

ADD-ON COURSE FOR THE AY 2022-23

Course Objectives

- 1. Students will understand the basic principles, process and functions of plant growth and reproduction.
- 2. Students will understand how to propagate, sustainably grow, manage and harvest a variety of plants in a diverse set of environmental marketing conditions.
- 3. Students will have supervised, hands on work experience in the area of horticulture.
- 4. Students will understand how to propagate plants by seeds, cuttings, and grafting, budding, layering and by micro propagation.

[Theory – 17 hrs]

Module 1 – Introduction to Horticulture [1 hr]

a. Scope and importance of horticulture

Module 2– Modern Trends in Gardening [2 hrs]

- a. Indoor gardening -Introduction and Preparation of Indoor garden
- b. Vertical gardening Introduction and Preparation of Vertical garden
- c. Kokedama Introduction and Preparation of Kokedama

Module 3 - Flower arrangements [5 hrs]

- a. Fresh flower arrangements Essentials in flower arrangement, Principles of flower arrangement, Equipments for flower arrangement, Floral Arrangement Styles
- b. Dry flower arrangements Materials for dried arrangement, Advantages of dried arrangement over fresh flowers

Module 4 - Modern Trends in Horticulture [3 hrs]

- a. Terrarium Types of Terrarium, Preparation of a Terrarium and its steps, Maintenance of the terrarium, Plants suitable for terrarium
- b. Bonsai Making, Caring and styles of bonsai

Module 5 - Propagation methods [6 hrs]

- a. Layering Ground layering, Compound layering, Tip layering, Air layering, Trench Layering and Mound layering
- b. Budding T-Budding, Inverted T-Budding and Patch Budding.
- c. Grafting Whip and Tongue grafting, Wedge grafting, Crown grafting, Side grafting and Approach grafting

[Practical - 13 hrs]

- a. Preparation of fresh flower arrangements
 - i. All-round arrangement
 - ii. Facing arrangement
 - iii. Mass style
 - iv. Line Arrangements
 - v. Triangular Arrangement
 - vi. Crescent Arrangement
 - vii. 'S' shaped flower arrangement
- b. Preparation of dry flower arrangements
- c. Preparation of a Terrarium
- d. Propagation methods Layering, Budding and Grafting
- e. Preparation of Vertical garden
- f. Preparation of Kokedama

References

- 1. V. Kumaresan, Horticulture & Plant Breeding [2010] Saras publications, Newdelhi
- 2. Adam C.R. (2004). Principles of Horticulture. Elsevier Butterworth-Heinemann.
- 3. Peter K. V. (2015). Basics of Horticulture. New India Publishing Agency, New Delhi.
- 4. Gupta S.N. (2016). Instant Horticulture. Jain Brothers, New Delhi.
- 5. Tiwari A.K. and R. Kumar (2012). Fundamentals of Ornamentals, Horticulture and Landscape Gardening. New India Publishing Agency, New Delhi

Assessment Procedure

• Written examination [both descriptive and objective] along with practicals

Grading

• For grading 5 Point scale analysis will use

Scale	Scale Averages	Final Grade
4.50 to 5.00	90 to 100	A
4.00 to 4.49	80 to 89	В
3.50 to 3.99	70 to 79	C
3.00 to 3.49	60 to 69	D
1.00 to 2.99	0 to 59	F

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