

E.M.G. YADAVA WOMEN'S COLLEGE, MADURAI -14.

(An Autonomous Institution – Affiliated to Madurai Kamaraj University)

(Re –accredited (3rd cycle) A+ & CGPA 3.51 Grade by NAAC

CBCS

DEPARTMENT OF BOTANY

CERTIFICATE COURSE IN HORTICULTURE

Course Structure

(w.e.f.2018 - 2019 onwards)

- This Course is open to all UG second year students
- Duration of the Course: One year

Contact Hours: 90 hrs

SL NO.	SUBJECT CODE	TITLE OF THE PAPER	EXAM DURATION	MAXIMUM MARKS
1.	19GC1	THEORY: Propagation of Horticultural crops	3hrs	100
2.	19GCP	PRACTICAL: Methods of propagation techniques	3hrs	100

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w.e.f.2018 - 2019 onwards

Title of the Paper : Propagation of Horticultural crops

Semester : III & IV

Contact hours : 45hrs

Subject Code : 19GC1

AIM: To give hands on training on methods of propagation of some important horticultural crops.

Unit-I: Introduction - Origin and history of gardening, Importance of Horticulture- Division of horticulture- 1. **Pomology** - It refers to the study of fruit crops. 2. **Olericulture** - It refers to the cultivation of vegetables. 3. **Floriculture** - Growing, arranging flowers and flowering plants.

Unit-II: Propagation of Horticultural crops - Sexual propagation- Seedage – advantages and disadvantages. **Asexual propagation** - Methods of propagation - Cuttage (Cutting and Layering) Graftage (Grafting and Budding) (Any 3 methods in each). Its advantages and disadvantages.

Unit-III: Organic farming- Farm Yard Manure (FYM), Panchakavya and Compost, **Transplanting methods** - Bare rooted, Shifting, Balling and purlapping. **Horticultural Techniques** – Training, Pruning, Ringing, Notching and Smudging.

Unit-IV: Kitchen (or) Home garden - Selection of site, Layout, Choice of Plants- Importance of Kitchen garden, **Green house types** - Glass house, Net house and cloth house.

Unit-V: Ornamental gardening - Components-Lawn, Topiary, Trophy, Indoor gardening - Care of indoor plants. Rockery, Bonsai, Plants in containers, Hanging Baskets.

Text Books:

1. Kumaresan. K. *Horticulture and Plant Breeding*, Saras publication, (2015).
2. Manibushan Rao, K. *Text book of Horticulture*, Macmillan Publishing Company, India, (1991).
3. Sheela, V.L. *Horticulture*. M.J.P. Publishers, Chennai, (2011).

Reference Books:

1. Chris Bird. M. *Fundamentals of horticulture*, Cambridge University Press, (2014)..
2. Jitendra singh, S. *Basic Horticulture*, Kalyani Publishers, Chennai, (2017).
3. Kumar, N. Abdul Khader, M. D., Rangaswami, P. and Irulappan, I. *Introduction to Spices, Plantation Crops and Medicinal Plants*. Jain Book publishers, New Delhi, (2015).
4. Peter. K.V. *Basics of Horticulture*, New India Publishing Agency, New Delhi, (2017).
5. Salaria, A.S. Babita S. Salaria, *A to Z Horticulture at a Glance*, Vol. I and II. Jain Book publishers, New Delhi, (2013).
6. Sharma, B.B. *Growing fruits and vegetables*. Division, Ministry of information and Broadcasting, Govt. of India, (2005).

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Title of the Paper : Methods of propagation techniques

Semester : III & IV

Contact hours: 45hrs

Sub-code : 19GCP

Practical:

1. Propagation methods- cutting, layering, grafting, budding.
2. A model kitchen garden- by students (Growing vegetables like Ladies Finger, Radish, Cluster bean, Greens)
3. A small lawn making (using grass turf)
4. Miniature Rockery and Bonsai -Demonstration
5. Plants in containers- Maintenance by students
6. Visit to a Botanical Garden-Agriculture College Madurai.