

RKDF UNIVERSITY

VALUE ADDITION COURSE

ON

Gardening and Horticulture



Organized By:

Faculty of Agriculture

RAMKRISHNA DHARMARTH FOUNDATION UNIVERSITY

Gandhi Nagar, Bhopal, Madhya Pradesh, India-462033

Preface

Horticulture has now become the backbone of Indian economy, as we are the second largest producer of fruits and vegetables in the world. Although, a bulk of this production goes waste as post-harvest losses, yet several value added products have been developed for their use in our daily life. However, our productivity is dismally low than several other countries of the world primarily because horticulture sector is encountered with several problems, and to tackle these problems, several technologies have been standardized by the scientists. This value added course provides information on different aspects of fundamentals of gardening & basics of horticulture science viz., Nursery raising, Garden tools, propagation of horticultural crops through seeds and asexual/vegetative methods, , identification of different fertilizers and organic manures etc. The different topics in this course to impart practical knowledge to the students and will also help in their skill development. The manuscript gives an overview of basics of various horticultural crops, their identification, propagation techniques, different manures-fertilizers, irrigation techniques and other crop managerial knowledge with a technical edge.

Objectives:

At the end of the course, learner will be able to know and understand the aims and outcomes in form of:

1. Acquiring basics of Horticulture science.
2. Acquire knowledge of basic garden tools.
3. Importance of plant propagation methods.
4. Role of nurseries in Horticultural development.
5. Types of plant propagation nurseries.
6. Various sections in the nursery and their importance.
7. Resources management for starting a horticulture enterprise.
8. As an entrepreneur for establishing its own horticulture enterprise.

SYLLABUS CONTENT

S. No	Topic Name	
	Theory	Practicals
Unit-1	Horticulture - Its definition and branches.	-
Unit-2	Importance and scope of Horticulture science	-
Unit-3	Climate requirement for horticultural crops.	-
Unit-4	Soil for horticultural crops	-
Unit-5	Horticultural and botanical classification.	-
Unit-6	Varietal wealth of Horticultural crops	-
Unit-7	-	Nursery raising
Unit-8	Sowing & planting times and methods	-
Unit-9	Seed rate and seed treatment for vegetable crops	-
Unit-10	-	Garden Tools and its use in field
Unit-11	Principles of orchard establishment.	-
Unit-12	-	Plant propagation-methods and propagating structures.
Unit-13	Seed dormancy, Seed germination, Juvenility and flower bud differentiation; unfruitfulness;	-
Unit-14	Pollination, pollinizers and pollinators; fertilization and parthenocarpy	-
Unit-15	-	Principles and methods of training and pruning in fruit plants
Unit-16	-	Methods of staking and pruning in vegetable crops
Unit-17	Definition and importance of Medicinal and aromatic plants.	-
Unit-18	Importance of plant bio-regulators in horticulture.	-
Unit-19	Irrigation and its methods.	-
Unit-20	-	Demonstration of application irrigation methods in the field
Unit-21	Fertilizers application in horticultural crops.	-
Unit-22	-	Demonstration of fertilizer application methods in the field
Unit-23	Plant growing structure (viz.,Polyhouse and shad net house)	-
Unit-24	Harvesting and Preparation for market (Grading and Packaging)	-
Unit-25	Production technology of some important vegetables like Potato, Tomato, Onion	-
Unit-26	Production technology of some important leafy vegetables like Palak, Fenugreek and Coriander	-
Unit-27	Production technology of some important Fruits like Guava, Mango , Banana	-

Unit-28	Production technology of some important Flower like Rose, Marigold, Gerbera, Gladiolus	-
Unit-29	-	Arrange visit to nearby organic field
Unit-30	Economic analysis of horticultural crops	-

GENERAL INFORMATION AND COURSE STRUCTURE

1. Duration of training : 30 Days
2. Eligibility Criteria : 10+2
3. Trainees per unit : 25
4. Language : Hindi/ English
5. Level - Certificate
6. Teaching mode: Offline classes, smart classes, videos, field visit, demonstration and PDF notes

MARKING SCHEME

S.No.	Name Of Course/ Group	Name Of Subject					
			Theory Marks	Practical marks	Total Marks	Max Mark	Min Marks
1	Value Addition Course	Gardening and Basic Horticulture	80	20	100	40	10

COURSE ORGANIZER

Mr. Vivek Gumasta, Assistant Professor, Faculty of Agriculture, RKDF University

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TECHNICAL COMMITTEE ORGANIZER

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