



AY 2020-21 Onwards

Hindi Vidya Prachar Samiti's
RAMNIRANJAN JHUNJHUNWALA COLLEGE (AUTONOMOUS)
(Also known as R. J. College of Arts, Science & Commerce as per UGC Notification)

Affiliated to UNIVERSITY OF MUMBAI II Recognized by UGC under 2f & 12B
NAAC Accredited 'A GRADE' with CGPA 3.50

Knowledge is all Ambrosia

**Postgraduate
Diploma in**

**Horticulture
&
Landscape
Gardening**



www.rjcollege.edu.in



rjcollege@rjcollege.edu.in



+91 22 25151763



Opposite Railway Station, Ghatkopar (W),
Mumbai 400 086, Maharashtra, INDIA.



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Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II



Hindi Vidya Prachar Samiti's
RamniranjanJhunjhunwala College
Of Arts, Science & Commerce
(Autonomous College)

Affiliated to
UNIVERSITY OF MUMBAI

Syllabus for the Post Graduate Diploma

**Program: Post Graduate Diploma in
Horticulture and Landscape Gardening**

Program Code: RJSPGDHLG

(Revised Syllabus Academic year 2020-2021)

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

Post Graduate Diploma in Horticulture and Landscape Gardening

(Program Code: RJSPGDHLG)

Preamble: Plants are the primary producers of an ecosystem all heterotrophs are dependent on plants for energy. Organized development of green areas to meet the needs of human in terms of food, aesthetic value, recreation, and relaxation has been done from time immemorial. Sustainable development can be ensured by growing your own produce by utilizing available resources and this will also promote the concept of reduce, recycle and reuse. Plant propagation can be achieved in many ways and a systematic approach to learn and translate it in action can open up many opportunities. With shrinking land size and limitations of resources like water rapidly emerging techniques are vertical farming and hydroponics to name a few. Technology can also be applied leading to automation of the process. The course is designed to develop skills and competences required for gardening and landscape designing for those who have previous expertise and for amateur who like to explore the avenues available in this area.

Program Objectives and Outcomes: This course is based on systematic teaching, learning and evaluation techniques. Quality based training and comprehensive coaching provided by experts from industries would fulfill following objectives:

- To understand the concept of different types of horticultural practices
- Apply the basic principles and components of gardening
- Learn to design various types of formal and informal gardens
- Establish and maintain special types of gardens for outdoor and indoor landscaping

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

Title: Post Graduate Diploma in Horticulture and Landscape Gardening

Eligibility: Any Bachelor's Degree in arts / Commerce / Science/three years
Diploma after XIIth std/ITI equivalent to three-year degree program.

Duration of the Course: One Year (Part- time) Blended teaching weekends

Fee Structure:

Tuition Fee	:	15,000.00
RFID	:	150.00
Examination Fees	:	500.00
Application form fees	:	Rs 100.00

Intake capacity: 40 students

Faculty: Drawn from Industry and Academia Proficient in areas of horticulture, Botany, plant propagation, consultant

Standard of Passing:

- Candidate who secures minimum 50% marks in each paper be declared to have passed the examination in that subject.
- A candidate who fails to secure 50% marks in a paper will be allowed to reappear in that paper.
- Candidate can carry forward at his/her option the marks in the paper in which he/she has passed, in such a case student is entitled for award of class.
- Candidate who secures a minimum of 50% marks in each paper and an aggregate of 60% and above marks on the whole shall be declared to have passed the examination in the First Class.
- Candidate who secures a minimum of 50% marks in each paper and an aggregate of 70% and above marks on the whole shall be declared to have passed the examination in First Class with Distinction.

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

Medium of Instruction : English

Field Visit : Gardens Formal, Informal, Botanical Garden, Trails for identifying plants, field vegetables, orchards, nurseries, terrace gardens etc.

Scheme of Evaluation:

There would be continuous evaluation with Internal assessment consisting of multiple-choice questions, quiz, presentation, assignments 40% weightage

External Evaluation: Subjective with 60% weightage

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

SEMESTER I

PAPER	TITLE OF PAPER	INTERNAL		EXTERNAL		CREDITS	COURSE CODE
		Maximum	Minimum	Maximum	Minimum		
I	Basic Principles of Gardening	40	16	60	24	8	RJSPGDHLG101
II	Landscape Gardening and Design	40	16	60	24	8	RJSPGDHLG102
	Practical s' in Plant Propagation, Visit to formal and Informal Gardens Report writing	40	16	60	24	8	RJSPGHLG P101 & RJSPGHLG P102
	Total	120	48	180	72	24	

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

SEMESTER II

PAPER	TITLE OF PAPER	INTERNAL		EXTERNAL		CREDITS	COURSE CODE
		Maximum	Minimum	Maximum	Minimum		
I	Nursery Production and management	40	16	60	24	8	RJSPGDHLG 201
II	Application of Technology, Computer aided Landscape design and Emerging concept	40	16	60	24	8	RJSPGDHLG 201
	Practical s' in computer aided Landscape designing and Landscape Gardening includes visits to Gardens Project work	40	16	60	24	8	RJSPGDHLGP201 & RJSPGDHLGP202
	Total	120	48	180	72	24	

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

SEMESTER I

Paper I: Basic Principles of Gardening

8 Credits

UNIT- 1:

Basic Botany: Introduction to Kingdom Plantae, Botanical terminologies, Types of plants and plant parts, Morphological characters

UNIT- 2:

Soil and its characteristics, Potting Mixtures, Essential soil elements, Mineral nutrition and Garden implements. Common plant pests and pest management

UNIT- 3:

Propagation Methods: Seeds (Germination, Viability, Dormancy, Storage, Transplantation), Grafting, Cutting, Layering, Division, Budding, Scaling, Scoping, Microgreens.

UNIT- 4:

Commercial Horticulture: Mushroom Cultivation, Kokedama, Terrariums, Dish Garden, Hanging Baskets, Bonsai, Indoor foliage plants and maintenance

Post Graduate Diploma in Horticulture and Landscape Gardening Syllabus Semester I & II

SEMESTER I

Paper II: Landscape Gardening and Design

8 Credits

UNIT- 1:

Styles of Garden: Formal and Informal, Landscape Features: Edges, Hedges, Arches, Pergolas, Avenues, Flower beds, Trellis, Topiary

UNIT- 2:

Garden Feature: Garden pool, waterfall, fountain, rocks, walk, pavements, bridges, lawns, fences, gates, statues, towers, plant raised beds and containers,

UNIT- 3:

Specialized Gardens: Aquatic garden, Rock garden, Kitchen garden, Herb Garden, Butterfly garden, Japanese garden, Botanical garden, Mughal garden, English garden, Terrace garden

UNIT- 4:

Floriculture: Cultivation, Harvesting, Packaging of flowers, Flower arrangement (Ikebana, Bouquet, Dry flower arrangements) and Annuals, Biennials, perennials. Importance of flower shows and exhibitions

Practical's Semester I

Practical I and II

8 Credits

1. Remedial course for non Botany students in Plant Morphology
2. Soil types, properties of soil (pH, water holding capacity, moisture content, preparation of soil for seed germination
3. Preparation of compost, bioenzyme, recycling of waste as planting containers
4. Seed morphology, seed viability, seed testing, seed germination techniques, breaking seed dormancy, percentage germination, preparation of seedlings for transplantation.
5. Methods of propagation: Leaf, stem cutting, budding, grafting, air layering, propagation by vegetative propagating organs like rhizome, stem tuber, bulb, corm, root suckers etc
6. Mushroom cultivation includes report writing
7. Bonsai and visit to see various types of Bosai
8. Preparation of Kokedama, Terrariums, Dish Garden, Hanging baskets, propagation of foliage plants for indoors
9. Flower arrangements fresh and dry various styles of arrangements, bouquets
10. Visit to flower shows and exhibitions report writing

SEMESTER II

Paper I: Nursery Production and Management, Post Harvest technology

8 Credits

UNIT I:

Nursery Management: Setting up of Nursery, budgeting and commercial scope.
Nursery for vegetable crops, flowering plants, fruit crops, medicinal and aromatic plants

UNIT II:

Greenhouse features: Types of greenhouses, Polyhouses, Specialized Greenhouses:
Temperate house, Tropical house, Succulents conservatory

Unit III:

Harvesting of fruits, vegetables and need for preservation, types of preservations

UNIT IV:

Post-harvest technology: Preparation of Jam, Jellies, Squash, Syrup, Pickle, Sauces.

SEMESTER II

Paper II: Application of Technology, Computer aided Landscape design and Emerging concept
8 Credits

UNIT I:

Plant tissue culture for mass propagation of plants (Plant tissue culture technology)

Unit II:

Green Building Concepts (Designing), Green Walls, Carbon credit, Global Warming, Sylviculture, Hydroponics, Aquaponics, Vertical farming

UNIT III:

Planning Outdoor gardens: Home Garden, Roof Garden, Terrace Garden, Children's Garden, Institutional garden, Park, Housing complex, Indoor gardening

UNIT IV:

Exotics: Palms, Orchids, Cycas, Bamboos, Conifers

Practical's Semester II

Practical I and II

8 Credits

1. Autocad Hands on training for Landscape design
2. Visit to commercial nurseries specialized on vegetable, fruits, foliage
3. Visit to Green houses
4. Preservation of vegetables and fruits
5. Preparation of Jam, Jelly, squash, sauces, pickle
6. Demonstration of Plant tissue culture technique lab visit
7. Hydroponics and Aquaponics
8. Practical's on Green wall, vertical gardens
9. Visit to formal gardens
10. Project work

List of Reference Books

1. Chadha K L (2002). Handkook of Horticulture ICAR
2. Peter K V (2008). (Ed.) Basics of Horticulture New India Publication agency
3. Bose T K., Maiti R G., Duha R S and Das P (1999).Floriculture and Landscaping
Naya Prakash
4. Sudheer K P and Indira V (2007) Post harvest technology of Horticultural crops
New India Publication agencies
5. Nambisan KMP (1992) Design elements of Landscape gardening Oxford and IBH
6. Arora J S (1999). Introduction to ornamental horticulture Kalyani Publishers
Ludhiana

Postgraduate Diploma in Horticulture

Sr. No	Roll No	Name of the Student	Grade	Certificate No
1	101	FATEMA FAKHRUDDIN NALWALA SAKINA NALWALA	O	PGDHLG-201920-01
2	102	BHOIR RUSHABH HIRAMAN ALAKA	O	PGDHLG-201920-02
3	103	BHOSALE ABHIJIT ASHOK VANITA	A+	PGDHLG-201920-03
4	104	BHOSALE RAJABAI KALABA CHATURABAI	O	PGDHLG-201920-04
5	106	DALI ANKIT AJIT AMITA	A+	PGDHLG-201920-06
6	107	GAIKWAD RUTURAJ SUNIL SANCHITA	A	PGDHLG-201920-07
7	108	GAMRE TRUSHNALI SANJAY SMITA	A+	PGDHLG-201920-08
8	109	GAWADE PRATIKSHA PRASHANT PRIYANKA	A+	PGDHLG-201920-09
9	110	GOLE-CHALKE ARCHANA DAJI NANDA	A+	PGDHLG-201920-10
10	111	GURAV VIVEK SANJAY ANNA PURNA	A+	PGDHLG-201920-11
11	112	HARNAIKAR ARBAZ MOHAMMADHANIF SHAHNAAZ	A	PGDHLG-201920-12
12	113	KADAM AKSHAYA ANANT SHASHIKANT	A+	PGDHLG-201920-13
13	114	KANGRALKAR SOMNATH VAIJNATH NARMADA	O	PGDHLG-201920-14
14	115	KARMARKAR DIVYA MUKUNDJOGLEKAR CHITRAJOGLEKAR	O	PGDHLG-201920-15
15	116	KHATATE AAKASH SANTOSH SAYALI	A	PGDHLG-201920-16
16	117	LULANI SOHEL SHAFI AKHATRI	A	PGDHLG-201920-17
17	118	MANE UDAY RAVINDRA SANGEETA	A+	PGDHLG-201920-18
18	119	MAURYA RAKHI RAJBAHADUR NIRMALA	A+	PGDHLG-201920-19
19	120	METHAR SUPRIYA DINESH DIKSHA	A+	PGDHLG-201920-20
20	121	MOHOD RAKSHA JANARDAN LALITA	A+	PGDHLG-201920-21
21	122	NAIK APURVA SUNIL SUNITA	A+	PGDHLG-201920-22
22	123	PANCHAL KOMAL ASHOK ASMITA	A+	PGDHLG-201920-23
23	124	PATEKAR AADESH SHIVRAM SUVARNA	A+	PGDHLG-201920-24
24	125	PATIL AMIT PRAKASH ASHALATA	A+	PGDHLG-201920-25
25	126	PAWAR AMOL JAGANNATH JAYSHREE	O	PGDHLG-201920-26
26	127	RANE MANGESH SHYAMSUNDAR SUREKHA	A	PGDHLG-201920-27
27	128	RANE VISHAL RAJENDRA SHRADDHA	O	PGDHLG-201920-28
28	129	RAUL VIRESH VINAYAK VINAYA	A	PGDHLG-201920-29
29	130	SHETTY SARTIKA VISHWANATH SANTOSHIKUMARI	A+	PGDHLG-201920-30
30	132	UGAVEKAR PRAJAKTA AMOL SUJATA	A+	PGDHLG-201920-32
31	133	WALUNJ DISHA DASHRAT SANGEETA	A+	PGDHLG-201920-33
32	134	REPALE VIKAS KRISHNA KUSUM	A	PGDHLG-201920-34
33	135	AITHAL HARSHINI RAMANANDA ANASUYA	A+	PGDHLG-201920-35
34	136	CHOUDHARY INDRA DOLARAM CHUUNIDEVI	A+	PGDHLG-201920-36
35	137	HADAL VISHAL VINU SHARMILA	A+	PGDHLG-201920-37
36	138	JADHAV ANIKET TULSHIRAM USHA	A	PGDHLG-201920-38
37	139	GANESH INDU GOPAL KOKILA	O	PGDHLG-201920-39
38	140	PATIL GAURI PRADEEP SARITA	O	PGDHLG-201920-40

39	141	PEDNEKAR YASHVANT GANESH LAXMI	A+	PGDHLG-201920-41
40	142	NIKAM NITESH BABURAO KUSUM	O	PGDHLG-201920-42
41	143	TAWDE VIKRANT CHANDRAHAS ARCHANA	A	PGDHLG-201920-43

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CERTIFICATE OF MERIT



This is to certify that

FATEMA FAKHRUDDIN NALWALA SAKINA NALWALA

has secured

"O"

in Postgraduate Diploma in Horticulture and Landscape Gardening

in the examination held in Aug 2020.

Controller of Examination

Principal

Certificate ID: PGDHLG-201920-01