

Vidya Prasarak Mandal's Advanced Study Center



ASC Course: 03

Syllabus for

## Programme: P. G. Programme

# Specific Programme: Landscape and Gardening

[Initiated in 1996 – 1997; 1<sup>st</sup> Update in 2016 – 2017; 2nd Update in 2019-2020]

<sup>3nd</sup> update with effect from

academic year 2020 - 2021

Course will be conducted on hybrid mode

Theory online practical offline

#### **Post - Graduation Programme in Landscape and Gardening**

#### Preamble

Post Graduate programme in Landscape and Gardening conducted by VPM's Advanced Study Centre is a part time, evening programme which can be easily completed by the people who are already employed or the fresh upcoming students. The programme is designed in such a way that the student after completing the course can get job in big hotels, or in big housing complex, row houses, farm houses, industries for maintaining their gardens or can be an entrepreneur having the big business of nursery or having his own consultancy. This is a very much upcoming field in India which has tremendous scope for monitory returns.

Keeping the advances in this field in mind the syllabus is modified accordingly. It deals with Organic Vegetables growing in farms or even in window seals keeping its commercial importance in view. And also, Commercial cultivation of flowers as it has recently turned out to be a subject of great interest as it ensures quick monetary gains and above all adds to the beauty of the nature.

Medicinal and aromatic plants have been a source of revenue since past and their importance is increasing these days and the study of same is added in the syllabus. Cultivation of such plants, taking care by using organic pesticides adds valu to the garden.

Landscape designing is a very much upcoming field, Functional uses of garden design, home landscaping, school garden, urban, state and national parks. Industrial landscaping, roadside planting, rock gardens, lawns have been included in landscape gardening. Besides, the students are prepared in the techniques of Bonsai, Ikebana, Composting and Bio-fertilizers.

Greenhouse technology and plant tissue culture are very popular these days and due coverage has been given in the course. Visits to nurseries aim at acquaintance with propagation techniques. Practical in food processing will cover different recipes and storage technology.

The course also includes field visits to various nurseries, gardens, and even landscape sites. This adds to the knowledge of practical implementation of the course. We also offer Internship and suggest the availability of jobs.

Successful completion of theoretical and practical aspects of the course will ensure upgradation of knowledge about horticulture to the extent of offering consultancy to absentee landlords and self-employment in any of the topics covered in the syllabus.

#### Eligibility: Open to All XII Pass Onwards

**Duration: 9 Months (Two days/Five hours a week)** 

Course Fees: Rs. 25,000/-

Course Delivery: Course will be conducted in Hybrid mode. 80% on line and Practical offline

#### **Programme Outcome:**

- The programme will fill the gap of knowledge as per requirement of industry.
- The programme will provide global level advanced and skill oriented deep knowledge to the learners for survival in global competition.
- The knowledge will improve the employability of the learner which can fetch good job opportunity.
- For those who are already in service will provide a good platform to upgrade their skills.
- The learner will get practical experience and will be updated about recent knowledge in the field.
- The programme is also designed for making the learner capable for self-employment or startups or own consultancy.

#### **Programme Specific Outcome:**

- Understanding the basics of landscaping
- Developing the basic skills in different types of landscaping
- Understanding the science of gardening
- Developing the skills and knowledge of different types of gardens
- Developing the skills of establishing and maintaining nursery

## **Syllabus and Question Paper Pattern of**

### **Course: Landscape and Gardening**

Course Code	Course Title	No. of lectures	Credits
ASCLGT1	Plant morphology and Horticulture	45	4
ASCLGT2	Nursery and lawn management and Entrepreneurship development	45	4
ASCLGT3	Landscaping and Gardening	45	4
ASCLGP1	Practical Training, I	30	4
ASCLGP2	Practical Training II	30	4
ASCLGP3	Dissertation	40	4
ASCLGP4	Field Visit	40	4
Total Credits		275	28

Course Code ASCLGT1			No. of lectures
<ul> <li>Learner can plants</li> <li>Learner will</li> <li>Learner will</li> <li>Learner will</li> </ul>	understand plant morphology and can differentiate in differ understand the habit and habitat of plants, which will be get knowledge of basic taxonomy of plants gain knowledge in basic plant physiology be able to identify plant sps for horticulture be able to understand methods of plant propagation		<b>•</b>
Unit I: Plant morp	hology	$\sim$	15
Unit II: Basics in g	general plant physiology		15
Unit III: Horticult	ure and propagation practices		15

<b>Course Code</b>	Course Title	Credits	No. of
ASCLGT2	Nursery and lawn management and Entrepreneurship development	4	lectures
<b>Course outcome</b>	s:		
Learner will lean	rn/Get knowledge/understand		
• the techni	ques to develop and maintain nursery		
• different p	lant pathogens and their control		
• the effect	of nutrient deficiency in plants		
<ul> <li>poly house</li> </ul>	e technology		
Mushroon	cultivation		
• science of	Bonsai making		
• Lawn main	ntenance and farm house garden management		
	Management, Production		15
Unit I: Nursery I	<u> </u>		15 15

Course Code	Course Title	Credits	No. of
ASCLGT3	Landscaping and Gardening	4	lectures
Course Outcome:			
Learner will learn	h/Get knowledge/understand:		
• Basics of La	andscaping		
Basic eleme	ents of Landscaping and their designing		
• Designing of	of gardens, Specialized gardens,		
• Landscape	soft wares like CAD		
Unit I: Introductio	on to Landscape and Elements in Landscaping		15
Unit II: Designing	of a Garden	$\sim$	15
Unit III: Landscap	be software, Case studies and Budgeting	$\overline{O}$	15

Course Code	Course Title	Credits
ASCLGP1 Practical Training, I		4
Plant Morphology (relationship)	oot, stem, leaf, inflorescence, flowers, fruits & seeds)	1 1 1 1 1
• Identification of, Ann	nuals, Perrenials, Seasonals,	
• Plant tissues		
• Seed Germination te	chniques for tree species	
• Identification of com	mon garden weeds and their control methods	
• Identification of inse	ct, fungal, bacterial and viral pest of ornamental plants and th	eir control methods
• Determination of Soi	il texture properties (temp, pH and texture)	
• Technique of potting	and repotting	
• Preparation of Hang	ing basket	
• Propagation of plants	s by cutting: Soft stem, semi hard and hard wood, Layering, C	Grafting and Buddin
• Demonstration of Ve	rmi-composting and Bio-composting	
• Flower arrangment a	nd Ikebana	
• Types of Bonsai and	technique	
Mushroom cultivatio		

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<b>Course Code</b>	Course Title	Credits
ASCLGP2	Practical Training II	4
• Identification of Phys	sical Elements in Landscape (Hardscape)	
• Identification of plan	ts- ground cover plants and bulbous plants, hedge and edge, perge	olas, arches,
Palms, foliage and flo	owering Shrubs, foliage and flowering, climbers and ramblers, La	wn grasses and
Plantation of lawn		
• Identification of Gard	den tools and Implements.	
• Landscape designing	of Residential area and Public Garden	
• Designing of Water g	garden (Lotus and Water Lilies), Rock Garden	
• Estimate of given gat	rden design- BOQ preparation	
• Designing of Tray La	andscape	
• Designing of Terrariu	ım	
• Reading of CAD Dra	wings	
• Case study based on	landscape design	
Field notebook comp	rising reports of all field visits.	

All practical should be entered in the journal. Only candidates with certified journal will be allowed for examination.

Course Code	Course Title	Credits	
ASCLGP3	Dissertation	4	

#### **Duration: 3 months**

Based on any subtopic from the syllabus or related to Applied Analytical Chemistry under the guidance of expertise from within or outside the institution.

#### **Guidelines for Dissertation:**

1. Students have to select their topic in consultation with the guide, who can be any faculty teaching the course or expert in the subject. (If the expert is not a teaching faculty of the course, biodata of expert is to be submitted in Advanced Study Centre and approval to be taken from Head, Advanced Study Centre.)

2. The outline of the dissertation (about 2/3 pages – 400/600 words) signed by the student & guide to be submitted on or before  $31^{st}$  December to Advanced Study Centre.

3. The student has to collect the data, relevant information, photographs, references in consultation of guide.

4. The dissertation in the hard bound format based on this data has to be submitted on or before 31<sup>st</sup> March to Advanced Study Centre.

5. Dissertation book should have certificate page signed by their respective guides and coordinator of the course.

6. Final power point presentation should be given by students at the time of examination.

7. Dissertation will comprise 75 Marks

### Format for submission of outline for dissertation Front page

Title of the topic:

Place of work: VPM's Advanced Study Centre.

Name of the student:

Name of the guide:

Date of submission:

Signature of guide

Signature of student

Details: Introduction, Review of Literature, Material & methods, Hypothesis, Results & Discussions, Conclusions, References.

Course Code	Course Title	Credits
ASCLGP4	Field visits	4

Students will have to bear their own expenses for the Field visits.

Five Field visits (1 long visit, 4 short visits) will be conducted (Students will have to bear their own expenses for the same)

Field Visits that can be taken from among following or such similar places

- 1. One long two day visit to Velneshwar/ Dapoli krishi vidyapeeth/ or such similar place.
- 2. One day visit to BKC on Terrace landscaping and designing.
- 3. One day visit to Any Nursery like Go green, Ganpatrao chavan.
- 4. One day visit to Hiranandani Powai garden for contour and podium landscape.
- 5. One day visit to Sagar Upvan for plant identification and their use in landscaping.
- 6. One day visit to Dattaji Salvi Udyan for plant identification and their use in landscaping

#### Industrial visit: Note book -

Students have to maintain Industrial visit- note book along with the photos at places visited. The observations have to be noted in Industrial visit- note book/ register. Diagrams/ drawings can be drawn or photographs can be stuck. Industrial visit- note book has to be presented at the time of practical examination.

Examination based on which viva voce will be conducted. (25 marks)

#### **Reference books:**

- I. Landscape Graphics by Grant W Reid FASLA. Watson Guptill publications.
- II. Form and fabri by Catherine Dee. Taylor & Francis
- III. Time saver standards for Landscape Architecture by Nicholas T. Dines & Charles W. Harris. Mcgraw hill publishing company.
- IV. The Tropical Look by Robert Lee Riffle. (encyclopedia of landscape plants).
- V. Some beautiful Indian climbers and shrubs by Bor and Raizada BNHS publication.
- VI. Creating Bonsai Landscapes by su chin ee
- VII. College Botany Vol I by Gangulee, Das and Datta, Published by J. N. Sen on behalf of New Central Book Agency 8/1 Chintamoni Das Lane, Calcutta-9 [INDIA]
- VIII. Some websites for plant morphology the fact <u>factor.com</u>, <u>byjus.com</u>
  - IX. Floriculture in India by G. S Randhawa, A Mukhopadhya, Allied publishers.
  - X. The book of Indian Trees by K.C Sahni, BNHS publication
  - XI. Floriculture and Landscaping by T.K Bose, R. G Maity, R. S Dhua, P. Das, Naya Prokash Publications.
- XII. Flowering trees and shrubs in India by Cowen D. V, Thacker Spink Publication.
- XIII. A handbook of Landscape: CPWD
- XIV. Horticulture in India: D. C. BansilC
- XV. Complete gardening in India: Gopalaswamiyengar
- XVI. Floriculture in India: G. S. Randhawa
- XVII. Handbook of Agriculture: ICAR
- XVIII. Ornamental gardening in India: Mishra
  - XIX. Home gardening: P. P. Trivedi
    - XX. Horticulture Nursery Management: YCMOU

### **Evaluation Scheme**

### Evaluation will be based on External and Internal examination in the ratio of 60:40 (External 60% weightage and Internal 40% weightage)

#### External:

Theory Examination: Suggested Format of Question paper \* Duration: 3 Hours

Total Marks: 60

All questions are compulsory

Q. 1	Based on Unit I		15
		OR	
Q. 1	Based on Unit I		15
Q. 2	Based on Unit II		15
		OR	
Q. 2	Based on Unit II		15
Q. 3	Based on Unit III	AL SILLAS	15
		OR	
Q. 3	Based on Unit III		15
Q. 4	Based on Unit I, II, III	N N N N	15
		OR	
Q. 4	Based on Unit I, II, III		15

• The pattern may differ if we have to conduct on line examination depending on the situation

#### Each question may consist of sub questions of following types

Full length question,	15 Marks
Short answer question	10 Marks
Short note questions	5 Marks
Objectives	2 Marks

**Internal Examination**: The internal examination will consist of various assignments which will include presentation of given topic, seminar on given topic, writing the given assignment, attending and reporting seminars and conferences, field experience, writing review articles, Review of books, publishing research paper, presenting research paper, project, participating in conference at organizational level, quizzes, brain games. And many such types. Depending upon the scope marks can vary.

There will be minimum one assignment on each unit of each course and two assignments on ASCLG04. (Thus total 11 assignments) The assignments need to be submitted in the given time limit. Each assignment will be of 10 marks and total marks of assignments will be converted to 40% marks.

#### **Total marks of Theory Examination**

Course Code	External	Internal	Maximum Marks
ASCLG01	60	40	100
ASCLG02	60	40	100
ASCLG03	63	40	100
TOTAL	क मडल		300

#### **Practical Examination**

Course Code	Details	Practical	Journal	Viva	Total
ASCLGP1	Practical – I	80	10	10	100
ASCLGP2	Practical – II	80	10	10	100
ASCLGP3	Dissertation				75
ASCLGP4	Field Note Book	(			25
Total				300	

Total of Theory Examination Total of Practical Examination Grand Total 300 Marks 300 Marks 600 Marks

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