

WEST BENGAL COUNCIL OF HIGHER SECONDARY EDUCATION

SYLLABUS FOR CLASSES XI AND XII

SECTOR: AGRICULTURE

JOB ROLE: GARDENER

COURSE OVERVIEW: Agriculture- Gardener

A Gardener in the Agriculture industry is very important job role related to landscaping and garden activity. Gardener performs the basic operations related to preparation of growing medium, seed bed, planting, transplanting and caring of plant and planting material. He is also responsible for tending lawns, trees, shrubs, ground covers. He/ she needs to aware of the soil and nutrition requirement of plants, pest and diseases and their control, tools and equipment, garden components, styles and feature of garden. Gardener need to acquire skills in grafting, cutting, budding, training, pruning, weeding and housing of flowers and vegetables. Need to know use of basic tools and hand powered machinery such as pruners, cutters, lawn mowers, etc.

COURSE OBJECTIVES

On completion of the course, students should be able to:

- Apply effective oral & written communication skills to interact with people & customers;
- Identify the principal components of a computer system;
- Demonstrate the basic skills of using computer;
- Demonstrate self-management skills;
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;
- Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
- Communicate effectively with the client
- Identify the principal components of a computer system
- Identify and control hazards in the work place that pose a danger or threat to their safety or health.
- Identify and safe use of tools and equipment.
- Perform the various garden operations
- Identify the major group of ornamental plants.
- Identify and prepare media for growing potted plants
- Establish and maintain lawn.
- Demonstrate the procedure of plant propagations.
- Identify and control of insect – pests, diseases and weeds in garden.
- Identify features and components of garden.
- Establish and maintain garden.
- Administer first aid to a casualty with small cuts, grazes, bruises, external bleeding, minor burns and scalds, etc.

COURSE STRUCTURE

JOB ROLE: GARDENER SECTOR: AGRICULTURE										
Class	Semester	Contact Hours						Marks		
		Employability Skills	Domain Theory	Domain Practical	Practical Exam/Written Test/ Viva	Project (Practical File/Student Portfolio/ Viva Voce)	Total	Theory		Practical
XI	I	70	30	30	-	-	130	25	Sum of Sem I & Sem II = 50	NIL
	II	40	37	68	10	15	170	25		50
XII	III	70	22	43	-	-	135	25	Sum of Sem III & Sem IV = 50	NIL
	IV	40	38	62	10	15	165	25		50

JOB ROLE: GARDENER**Class XI [Total Theory Marks: 25]****Class XI SEMESTER I TOPICS: (MCQ) MARKS: 25 [1 MARK PER QUESTION]**

SL No.	Topic	Tuition Hours	Marks Allotted
	Part A: Employability Skills	70	
1	Unit 1: Communication Skills- III	25	2
2	Unit 2: Self-management Skills – III	25	2
3	Unit 3: Information and Communication Technology Skills – III	20	2
	Part B: Vocational Skills	60	
4	Unit 1: Introduction to Floriculture	20	9
5	Unit 2: Nursery Management	40	10
Total		130	25

Class XI SEMESTER II TOPICS: [Short Answer Question, Descriptive Question] MARKS: 25

SL No.	Topic & Sub-Topics	Tuition Hours	Short Answer Type Question (8 Marks)	Descriptive Type Question (17 Marks)	Total
	Part A: Employability Skills	40			
1	Unit 4: Entrepreneurial Skills – III	25	1	2	3
2	Unit 5: Green Skills – III	15	1	2	3
	Part B: Vocational Skills	105			
3	Unit 3: Plant Propagation	40	2	5	7
4	Unit 4: Garden Tools and Equipment's	30	2	4	6
5	Unit 5: Soil management and field preparation	35	2	4	6
	Part C: Practical Work	10			
6	Practical Examination	06			
7	Written Test	01			
8	Viva Voce	03			
	Part D: Project Work/ Field Visit	15			
9	Practical File / Student Portfolio	10			
10	Viva Voce	05			
TOTAL		170	8	17	25

JOB ROLE: GARDENER
CLASS XII [TOTAL THEORY MARKS: 25]
CLASS XII SEMESTER III TOPICS: (MCQ) MARKS: 25 [1 MARK PER QUESTION]

SL No.	Topic	Hours Tuition	Marks Allotted
	Part A: Employability Skills	70	
1	Unit 1: Communication Skills – IV	25	2
2	Unit 2: Self-management Skills – IV	25	2
3	Unit 3: Information and Communication Technology Skills – IV	20	2
	Part B: Vocational Skills	65	
4	Unit 1: Nutrition and Irrigation	30	10
5	Unit 2: Care and Maintenance of Garden	35	9
	Total	135	25

Class XII SEMESTER IV TOPICS: [Short Answer Question, Descriptive Question] MARKS: 25

SL No.	Topic & Sub-Topics	Tuition Hours	Short Answer Type Question (8 Marks)	Descriptive Type Question (17 Marks)	Total
	Part A: Employability Skills	40			
1	Unit 4: Entrepreneurial Skills – IV	25	1	2	3
2	Unit 5: Green Skills – IV	15	1	2	3
	Part B: Vocational Skills	100			
3	Unit 3: Establishment and Maintenance of Lawn	20	2	3	5
4	Unit 4: Basic landscape designing and garden component	40	2	5	7
5	Unit 5: Identification of Ornamental Plant	40	2	5	7
	Part C: Practical Work	10			
6	Practical Examination	06			
7	Written Test	01			
8	Viva Voce	03			
	Part D: Project Work/ Field Visit	15			
9	Practical File / Student Portfolio	10			
10	Viva Voce	05			
	Total	165	8	17	25

DETAIL SYLLABUS
CLASS - XI
SEMESTER – I

Part A: Employability Skills			
Unit 1: Communication Skill – III			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 Hrs)
1. Demonstrate knowledge of various methods of communication	1. Methods of communication - Verbal - Non-verbal - Visual	1. Writing pros and cons of written, verbal and non- verbal communication 2. Listing do's and don'ts for avoiding common body language mistakes	05
2. Identify specific communication styles	1. Communication styles- assertive, aggressive, passive- aggressive, submissive, etc.	1. Observing and sharing communication styles of friends, teachers and family members and adapting the best practices 2. Role plays on communication styles.	10
3. Demonstrate basic writing skills	1. Writing skills to the following: ● Sentence ● Phrase ● Kinds of Sentences ● Parts of Sentence ● Parts of Speech ● Articles ● Construction of a Paragraph	1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject	10
Unit 2: Self-management Skills – III			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 Hrs)
1. Demonstrate impressive appearance and grooming	1. Describe the importance of dressing appropriately, looking decent and positive body language 2. Describe the term grooming 3. Prepare a personal grooming checklist 4. Describe the techniques of self- exploration	1. Demonstration of impressive appearance and groomed personality 2. Demonstration of the ability to self- explore	10

2. Demonstrate team work skills	1. Describe the important factors that influence in team building 2. Describe factors influencing team work	1. Group discussion on qualities of a good team 2. Group discussion on strategies that are adopted for team building and team work	10
3. Apply time management strategies and techniques	1. Meaning and importance of time management – setting and prioritizing goals, creating a schedule, making lists of tasks, balancing work and leisure, using different optimization tools to break large tasks into smaller tasks.	1. Game on time management 2. Checklist preparation 3. To-do-list preparation	05
Unit 3: Information and Communication Technology Skills - III			
Learning Outcome	Theory (08 hrs)	Practical (12 hrs)	Duration (20 Hrs)
1. Create a document on word processor	1. Introduction to word processing. 2. Software packages for word processing. 3. Opening and exiting the word processor. 4. Creating a document	1. Demonstration and practice of the following: ● Listing the features of word processing ● Listing the software packages for word processing ● Opening and exit the word processor ● Creating a document	10
2. Edit, save and print a document in word processor	1. Editing text 2. Wrapping and aligning the text 3. Font size, type and face. 4. Header and Footer 5. Auto correct 6. Numbering and bullet 7. Creating table 8. Find and replace 9. Page numbering. 10. Printing document. 11. Saving a document in various formats.	1. Demonstration and practicing the following: ● Editing the text ● Word wrapping and alignment ● Changing font type, size and face ● Inserting header and footer ● Removing header and footer 2. Using autocorrect option 3. Insert page numbers and bullet 4. Save and print a document	10

Part B: Vocational Skills			
Unit 1: Introduction to Floriculture			
Learning Outcome	Theory (15 hrs)	Practical (05hrs)	Duration (20 Hrs)
1. Describe floriculture, importance, present status and prospects	1. Define floriculture 2. Importance of flowers in daily life 3. Area and production of major flowers in India 4. Major flower producing states in India 5. Future possibilities of flower cultivation in India	1. Enlist major ornamental plants in India 2. Enlist major states producing flowering and ornamental plants.	10
2. Classify ornamental plants	1. Define loose flowers 2. Define cut flowers 3. Classify ornamental plants	1. Enlist different types of ornamental plants in chart 2. Identification of loose and cut flowers 3. Enlist the types of classification of ornamental plants	10
Unit 2: Nursery Management			
Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (40 Hrs)
1. Describe Nursery and its importance	1. Define nursery 2. Importance of Nursery 3. Criteria to select nursery site 4. Classification of different types of nursery 5. Mother block 6. Preparation of nursery beds 7. Precaution taken during preparation of nursery beds	1. Enlist important plants raised in nursery 2. Enlist the types of nursery 3. Identification of growing media 4. Demonstration of preparation of nursery beds 5. Draw a layout of nursery showing its features	15
2. Identify growing media	1. Define growing media 2. Types of growing media 3. Plant growth regulators 4. Types of plant growth regulators	1. Identification of growing media 2. Enlist plant growth regulators used in nursery	12
3. Grow seed and planting material	1. Methods of seed sowing 2. Precaution taken during seed sowing 3. Potting mixture 4. Procedure of potting, de potting and re potting 5. Application of manure and fertilizer to nursery plants 6. Care and maintenance of nursery plants	1. Demonstration of the process of seed sowing 2. Preparation of potting mixture 3. Demonstration of procedure for potting, de potting and re potting 4. Demonstration of application of manure and fertilizers in nursery plants	13

CLASS - XI
SEMESTER – II

Part A: Employability Skills			
Unit 4: Entrepreneurial Skills - III			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 Hrs)
1. Describe the significance of entrepreneurial values and attitude	Values in general and entrepreneurial values Entrepreneurial value orientation with respect to innovativeness, independence, outstanding performance and respect for work	Listing of entrepreneurial values by the students. Group work on identification of entrepreneurial values and their roles after listing or reading 2-3 stories of successful entrepreneur Exhibiting entrepreneurial values in Ice breaking, rapport building, group work and home assignments	10
2. Demonstrate the knowledge of attitudinal changes required to become an entrepreneur	Attitudes in general and entrepreneurial attitudes Using imagination/ intuition Tendency to take moderate risk Enjoying freedom of expression and action Looking for economic opportunities believing that we can change the environment Analyzing situation and planning action Involving in activity	Preparing a list of factors that influence attitude in general and entrepreneurial attitude. Demonstrating and identifying own entrepreneurial attitudes during the following micro lab activities like thematic appreciation test. Preparing a short write- up on “who am I”. Take up a product and suggest how its features can be improved. Group activity for suggesting brand names, names of enterprises, etc.	15
Unit 5: Green Skills - III			
Learning Outcome	Theory (07 hrs)	Practical (08 hrs)	Duration (15 Hrs)
1. Describe importance of main sector of green economy	Main sectors of green economy- E-waste management, green transportation, renewal energy, green construction, water management, Policy initiatives for greening economy in India	Preparing a poster on any one of the sectors of green economy Writing a two-page essay on important initiatives taken in India for promoting green economy	08
2. Describe the major green Sectors/Areas and the role of various stakeholder in green economy	Stakeholders in green economy Role of government and private agencies in greening cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries	1. Preparing posters on green Sectors/Areas: cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries	07

Part B: Vocational Skills			
Unit 3: Plant Propagation			
Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (40 Hrs)
1. Describe propagation and different methods of propagation	1. Define propagation 2. Definition of root stock 3. Definition of scion 4. Differentiate between sexual and asexual propagation 5. Merits and Demits of sexual propagation 6. What are different methods of asexual propagation 7. Describe sexual propagation	1. Identification of root stock and scion 2. Enlist method of propagation	05
2. Propagate plants by cutting	1. Types of cutting stem, root and leaf Merits and Demits of sexual propagation 2. Precautions to be taken while preparing and planting, cuttings 3. Merits and Demits of sexual 4. Procedure for preparing cuttings of stem, root and leaf	1. Demonstration and practice of the procedure of preparing cuttings	07
3. Propagate plant by layering	1. Types of layering 2. Precaution to be taken while performing layering 3. Procedure for layering	1. Demonstration and practice of the procedure of layering	07
4. Propagate plant by grafting	1. Types of grafting 2. Selection of scion 3. Precaution to be taken while prepare graft 4. Procedure of preparing graft	1. Demonstration and practice of the procedure of grafting	07
5. Propagate plant by budding	1. Types of budding 2. Precaution to be taken while preparing budding 3. Procedure for preparing budding.	1. Demonstration and practice of the procedure of budding	07
6. Multiplication of specialized organs	1. Procedure for multiplication of plants through specialized organ—bulbs, corm, tuber, rhizome, suckers, etc.	1. Multiply specialized structures -bulbs corm, Tuber, rhizome, suckers, etc.	07

Unit 4: Garden Tools and Equipment			
Learning Outcome	Theory (10hrs)	Practical (20 hrs)	Duration (30 hrs)
1. Identify tools and Equipment used in gardening	1. Different tools and equipment's used in garden 2. Utility of tools and equipment used in garden 3. Precaution taken during use of tools and equipment's	1. Identification of tools and equipment used in garden. 2. Demonstration of safe use of different tools and equipment for various purpose 3. Demonstration of the knowledge of undertaking basic safety checks before operation of all tools and equipment's	15
2. Maintain garden tools and equipment	1. Procedure of maintenance of garden tools and equipment	1. Demonstration of the procedure for maintaining garden tools and equipment	08
3. Keep records of tools and equipment	1. Records kept for inventory and maintenance of tools and equipment	1. Recording information about gardening tools and equipment and their maintenance	07
Unit 5: Soil management and field preparation			
Learning Outcome	Theory (12 hrs)	Practical (23 hrs)	Duration (35 hrs)
1. Recognize importance of soil properties for productivity	1. Define soil and soil genesis 2. Soil properties 3. Soils of India 4. Characteristics of major Indian soils	1. Enlist the soil of India 2. Enlist the state wise distribution of soil	07
2. Demonstrate soil reclamation and soil sampling	1. Soil reclamation 2. Methods of reclamation 3. Procedure of soil sampling 4. Interpretate result of soil testing	1. Enlist the method of soil reclamation 2. Demonstration of procedure for taken soil sample	08
3. Prepare field for garden	1. Preparation of field for gardening 2. Selection of site for growing flowers 3. Optimum agro- climatic conditions for growing ornamental plants	1. Identification of tools and equipment used for field preparation 2. Demonstration of the procedure for field preparation.	20

DETAIL SYLLABUS
CLASS - XII

SEMESTER – III

Part A: Employability Skills			
Unit 1: Communication Skills – IV			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Total Duration (25 Hrs)
1. Describe the steps to active listening skills	1. Importance of active listening at workplace 2. Steps to active listening	1. Demonstration of the key aspects of becoming active listener 2. Preparing posters of steps for active listening	10
2. Demonstrate basic writing skills	1. Writing skills to the following: ● Sentence ● Phrase ● Kinds of Sentences ● Parts of Sentence ● Parts of Speech ● Articles ● Construction of a Paragraph	1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject	15
Unit 2: Self-management Skills – IV			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Total Duration (25 Hrs)
1. Describe the various factors influencing self-motivation	1. Finding and listing motives (needs and desires); 2. Finding sources of motivation and inspiration (music, books, activities); expansive thoughts; living fully in the present moment; dreaming big.	1. Group discussion on identifying needs and desire 2. Discussion on sources of motivation and inspiration	10
2. Describe the basic personality traits, types and disorders	1. Describe the meaning of personality 2. Describe how personality influence others 3. Describe basic personality traits 4. Describe common personality disorders- paranoid, antisocial, schizoid, borderline, narcissistic, avoidant, dependent and obsessive	1. Demonstrate the knowledge of different personality types	15

Unit 3: Information and Communication Technology Skills - IV			
Learning Outcome	Theory (10 hrs)	Practical (10 hrs)	Total Duration (20 Hrs)
1. Perform tabulation using spreadsheet application	1. Introduction to spreadsheet application 2. Spreadsheet applications 3. Creating a new worksheet 4. Opening workbook and entering text 5. Resizing fonts and styles 6. Copying and moving 7. Filter and sorting 8. Formulas and functions 9. Password protection. 10. Printing a spreadsheet. 11. Saving a spreadsheet in various formats.	1. Demonstration and practice on the following: ● Introduction to the spreadsheet application ● Listing the spreadsheet applications ● Creating a new worksheet ● Opening the workbook and enter text ● Resizing fonts and styles ● Copying and move the cell data ● Sorting and Filter the data ● Applying elementary formulas and functions ● Protecting the spreadsheet with password ● Printing a spreadsheet ● Saving the spreadsheet in various formats.	10
2. Prepare presentation using presentation application	1. Introduction to presentation 2. Software packages for presentation 3. Creating a new presentation 4. Adding a slide 5. Deleting a slide 6. Entering and editing text 7. Formatting text 8. Inserting clipart and images 9. Slide layout 10. Saving a presentation 11. Printing a presentation document.	1. Demonstration and practice on the following: ● Listing the software packages for presentation ● Explaining the features of presentation ● Creating a new presentation ● Adding a slide to presentation. ● Deleting a slide ● Entering and edit text ● Formatting text ● Inserting clipart and images ● Sliding layout ● Saving a presentation ● Printing a presentation document	10

Part B: Vocational Skills			
Unit 1: Nutrition and Irrigation			
Learning Outcome	Theory (12 hrs)	Practical (18 hrs)	Duration (30 Hrs)
1. Identify manures and fertilizer	1. Define manures 2. Define fertilizers 3. Classification of manures and fertilizers 4. Use of manures and fertilizers 5. Define Bio-fertilizers 6. Describe vermicomposting	1. Identification of manures 2. Identification of fertilizers 3. Identification of Bio-fertilizers 4. Enlist the name and percentage of nutrients in fertilizers 5. Enlist the nutrients of different type of manure.	10
2. Apply manures and fertilizers	1. How and when manure can be applied 2. Describe method of manure and fertilizers application 3. Application of bio-fertilizers	1. Demonstration of methods of application of fertilizers 2. Demonstration of the application of manure 3. Demonstration of the application of bio-fertilizers	10
3. Demonstrate methods of irrigation	1. Methods of irrigation 2. Advantages and disadvantage of different methods of irrigation 3. Drainage and its importance 4. Drips and sprinkler irrigation systems	1. Identification of the equipment and parts used in Drip irrigation 2. Identification of components of sprinkler irrigation 3. Demonstration of different irrigation method	10

Unit 2: Care and Maintenance of Garden			
Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (35 Hrs)
1. Demonstrate Integrated Insect pest management	1. Pest management 2. Nature of insect damage 3. Control of insect pests a. Cultural method b. Bio-logical control c. Chemical control 4. Common insect pests of ornamental plants 5. Common insecticides and their uses	1. Identification of common insect pest of ornamental crops 2. Identification of common insecticides 3. Enlist the cultural methods use for insect pest control 4. Demonstration the application of insecticides 5. Demonstration of safety measure taken during application of pesticides.	10

2. Demonstrate Integrated disease management	1. Define disease 2. Symptoms of common diseases of ornamental plants 3. Important diseases of ornament plants 4. Integrated disease management: a. Chemical control b. Cultural methods c. Bio-control 5. Application of fungicides	1. Enlist common diseases of ornamental plants 2. Identification of common diseases of ornamental crops 3. Identification of common fungicides 4. Demonstration of the application of fungicides 5. Enlist cultural methods used for disease management.	08
3. Demonstrate integrated weed management	1. Define weed 2. Common weeds of ornamental crops 3. Methods of weed control a. Cultural and physical method of weed control b. Chemical control 4. Types of herbicides use for weed control	1. Identification of common weeds 2. Enlist the herbicides used for weed control 3. Identification of common herbicides 4. Demonstration of cultural methods for weed control	07
4. Understand common cultural operations	1. Important cultural operations viz., Harrowing, mulching, stalking, earthing up, training, pruning, pinching, dis budding, etc.	1. Identification of tools and equipment used in cultural operation 2. Demonstration of training, pruning, stalking and pinching.	10

DETAIL SYLLABUS
CLASS - XII
SEMESTER – IV

Part A: Employability Skills			
Unit 4: Entrepreneurial Skills - IV			
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Total Duration (25 Hrs)
1. Identify the general and entrepreneurial behavioural competencies	1. Barriers to becoming entrepreneur 2. Behavioural and entrepreneurial competencies – adaptability/ decisiveness, initiative/ perseverance, interpersonal skills, organizational skills, stress management, valuing service and diversity	1. Administering self-rating questionnaire and score responses on each of the competencies 2. Collect small story/ anecdote of prominent successful entrepreneurs 3. Identify entrepreneurial competencies reflected in each story and connect it to the definition of behavioral competencies 4. Preparation of competencies profile of students	10
2. Demonstrate the knowledge of self-assessment of behavioural competencies	1. Entrepreneurial competencies in particular: self - confidence, initiative, seeing and acting on opportunities, concern for quality, goal setting and risk taking, problem solving and creativity, systematic planning and efficiency, information seeking, persistence, influencing and negotiating, team building	1. Games and exercises on changing entrepreneurial behaviour and development of competencies for enhancing self-confidence, problem solving, goal setting, information seeking, team building and creativity	15

Unit 5: Green Skills - IV			
Learning Outcome	Theory (05 hrs)	Practical (10 hrs)	Total Duration (15 hrs)
1. Identify the role and importance of green jobs in different sectors	1. Role of green jobs in toxin-free homes, 2. Green organic gardening, public transport and energy conservation, 3. Green jobs in water conservation 4. Green jobs in solar and wind power, waste reduction, reuse and recycling of wastes, 5. Green jobs in green tourism 6. Green jobs in building and construction 7. Green jobs in appropriate technology 8. Role of green jobs in Improving energy and raw materials use 9. Role of green jobs in limiting greenhouse gas emissions 10. Role of green jobs minimizing waste and pollution 11. Role of green jobs in protecting and restoring ecosystems 12. Role of green jobs in support adaptation to the effects of climate change	1. Listing of green jobs and preparation of posters on green job profiles 2. Prepare posters on green jobs.	15

Part B: Vocational Skills**Unit 3: Establishment and Maintenance of Lawn**

Learning Outcome	Theory (08 hrs)	Practical (12hrs)	Duration (20 Hrs)
1. Select the site and establish lawn	1. Definition of lawn 2. Importance of lawn 3. Criteria for selection of site 4. Preparation of land for planting of grasses 5. Important grass varieties 6. Selection of the suitable variety 7. Methods used for planting of lawn grass	1. Enlist the criteria for selection of site 2. Demonstration of preparation of land for lawn 3. Demonstration of different planting methods of grasses 4. Identification of common grasses for lawn	10
2. Care and maintenance of lawn	1. Different operations performed for maintaining lawns 2. Irrigation and fertilizers application in lawn	1. Demonstration of mowing and rolling 2. Demonstration of weeding 3. Demonstration of process of scraping and racking 4. Demonstration of application of manures and fertilizers 5. Demonstration of irrigation procedures	10
Unit 4: Basic landscape designing and garden component			
Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (40 hrs)
1. Landscape gardening and its importance	1. Define landscaping 2. Aims of landscaping 3. Principles of landscaping 4. Scope of landscaping 5. Describe features of garden 6. Criteria for selection of site for landscape gardening 7. Landscaping of educational institution 8. Landscaping a small home ground	1. Enlist principles of landscaping 2. Enlist features of garden 3. Enlist the criteria for selection of site for gardening 4. Organisation of visit to show garden components	15
2. Styles of gardening	1. Different styles of garden 2. Importance of garden designs 3. Features of Japanese garden	1. Enlist different styles of garden 2. Identification of formal and informal gardens 3. Enlist feature of Japanese garden	15

3. Describe Indoor gardening	1. Definition of indoor gardening 2. House plant and indoor gardening 3. Describe gardening in: a. Hanging baskets b. Window garden c. Miniature garden	1. Identification of the foliage, succulents and creepers used in indoor garden 2. Identification of different types of container used indoor gardens 3. Demonstration of planting of foliage plant in pot	10
Unit 5: Identification of Ornamental Plant			
Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (40 hrs)
1. Identify ornamental trees, shrubs, seasonal flowers, flowering bulbs, and aquatic plants	1. What are important ornamental plants 2. Classification of seasonal flowers 3. Classification of flowering and foliage trees 4. Classification of shrubs 5. Common Bulbous plant 6. Important aquatic plant	1. Enlist common flowering trees 2. Enlist common shrubs 3. Enlist common seasonal flowers 4. Identification of important trees 5. Identification of common shrubs 6. Identification of seasonal flowers	20
2. Identify Hedge and Edge plants	1. Important Hedge plants 2. Common Edge plants	1. Identification of Hedge plants 2. Identification of Edge plants	10
3. Identify climbers	1. Define climbers and creepers 2. Importance of climbers/ creepers in landscape gardening 3. Climbers/ creepers used in landscape gardening	1. Enlist important climbers used in landscape gardening 2. Identification of common climbers/ creepers	10

ORGANISATION OF FIELD VISITS

In a year, at least 3 field visits/educational tours should be organized for the students to expose them to the activities in the workplace.

Visit a garden and observe the following: Location, Site, net house, tools and equipment, types of plant, Pot yard, type of garden, lawn, Seed bed, Nursery bed, Water tank/ Tube well, Gate and fencing. During the visit, students should obtain the following information from the owner or the supervisor of the nursery:

1. Area under garden and its layout
2. Types of garden
3. Features of garden
4. Tools and equipment used
5. Maintenance mechanism of garden
6. Types of plant – trees, climbers, annuals and perennials
7. Method of irrigation
8. Method of propagation of plant
9. Whether plants raised by micro propagation
10. Manpower engaged
11. Total expenditure of garden maintenance
12. Any other information
13. Any other information