

Garden Designer

Short Term Curriculum

(Competency Based)



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Introduction

This competency based short term curriculum for **Garden Designer** is designed to produce technical workforce in the field of garden designing to equip essential skills, knowledge and attitudes for garden designing in order to meet the demand of such workforce in the country so as to contribute in the national streamline of poverty reduction.

Aim

The aim of this curricular program is to produce skilled workforce in the field of garden designing by providing training and link the graduates to employment opportunities.

Objectives

After the completion of this training, the graduates will be able to:

- Identify materials for garden design and development
- Analyze/apply principle on of garden designing.
- Design different types of gardens.
- Market garden designing skills
- Apply Computer application skills in garden designing
- Develop entrepreneurship skills

Course Description

This curriculum provides skills and knowledge necessary for garden designer. There will be both demonstration by trainers/instructors and opportunity by trainees to carry out the skills/tasks necessary for these level of technical workforce. Trainees will practice and learn skills by using typical tools, materials and equipment necessary for this program.

This curricular program includes tasks/skills and related technical knowledge necessary for garden designing.

Duration

550 hours = 390 hours (In house training) + 160 hours (OJT)

Target Group

The target group for this training program will be individuals having + 2 levels pass with 5 years experience in the related field.

Group size

Maximum 24

Target location

All over Nepal

Medium of Instruction

Nepali or English or both

Pattern of attendance

80% in theory classes and 90% in Practical (Performance)

Focus of the curriculum

This is a competency-based curriculum. This curriculum emphasizes on competent performance of the task specified in it. 80% time is allocated to the competencies and 20% to the essential related technical knowledge. So, the main focus will be on the performance of specified competencies/tasks /skills in the curriculum.

Entry criteria

Individuals who meet the following criteria will be allowed to enter in this curricular program:

- Minimum + 2 level pass with 5 years experience,
or
B.sc.Ag. or equivalent or in the related field
- Minimum of 16 years of age
- Should pass entrance examination

Instructional Media and Materials

The following instructional media and materials are suggested for the effective instruction and demonstration.

- Printed Media Materials (Assignment sheets, Case studies, Handouts, Information sheets, Individual training packets, Procedure sheets, Performance Check lists, Textbooks etc.).
- Non-projected Media Materials (Display, Models, Flip chart, Poster, Writing board etc.).
- Projected Media Materials (Opaque projections, Overhead transparencies, Slides etc.).
- Audio-Visual Materials (Audiotapes, Films, Slide-tape programs, Videodiscs, Videotapes etc.).
- Computer-Based Instructional Materials (Computer-based training, Interactive video etc.).

Teaching Learning Methodologies

The methods of teachings for garden designing program will be a combination of several approaches such as illustrated lecture, group discussion, demonstration, simulation, guided practice, practical experiences, fieldwork and other independent learning.

Theory: lecture, discussion, assignment, group work.

Practical: demonstration, observation, guided practice, independent practice and Project work.

Certificate requirement

The related training institute will provide the training certificate of **“Garden Designer”** to those individuals who fulfill all the requirements of this curriculum.

Trainers’ Qualification

- M.Sc.Ag (Horticulture) & job experience in the related field
- B.Sc. Ornamental horticulture with minimum 5 years of experience in related field.
- Bachelor in Architecture (Structural Design) Engineering with minimum 5 years experience in related field.
- Good communicative & instructional skills.

Trainer – Trainees Ratio

- 1:10 for practical classes
- Depends on the nature of subject matter and class room situation for theory classes.

Suggestion for instruction

- Select objectives.
 1. Select/write objective of cognitive domain.
 2. Select/write objectives of psychomotor domain.
 3. Select/write objectives of affective domain.
- Select subject matter.
 1. Perform detail study of the subject matter.
 2. Select subject matter/content related to cognitive domain.
 3. Select subject matter/content related to psychomotor domain.
 4. Select subject matter/content related to affective domain.
- Select Instructional/teaching Method(s).
 - Identify various methods:
 1. Teacher centered methods: Lecture, demonstration, question answer, inquiry, induction & deduction methods
 2. Student initiated methods: Experimental, field trip/excursion, discovery, problem solving, exploration, and survey methods
 3. Interaction methods: Discussion, group/team teaching, micro teaching, exhibition/demonstration methods.
 4. Dramatic methods: Role play and dramatization
 - Select instructional/teaching Method(s) on the basis of :
 1. The objective (s) of the lesson: Objective (s) of cognitive domain, Objective (s) of psychomotor domain, Objective (s) of affective domain
 2. The nature of the subject matter/content
 3. The level of knowledge, skill and attitudes of the learners
 4. The available educational/learning materials
 5. The instructors background and experiences
- Select appropriate educational materials and apply/use them at right time **and** place.
- Make plan(s) for class room/ field work/ workshop organization & management.
- Coordinate among objectives, subject matter/ content and instruction / teaching method(s).
- Prepare lesson plan(s) for:
 1. Theory class / lesson
 2. Performance / practical class / work /lesson.
 3. Deliver / conduct instruction / program
- Evaluate the trainees/students:
 1. Develop various tools of evaluation
 2. Evaluate the attainment of objectives related to cognitive, psychomotor and affective domains through the application/use of the various tools of trainee/student evaluation
- Evaluate the instruction / program

Suggestion for skill training

- **Demonstrate task performance**
 1. Demonstrate task performance in normal speed.
 2. Demonstrate slowly with verbal description of each and every steps in the sequence of activity flow of the task performance using question and answer techniques
 3. Repeat it for the clarification on trainees demand if necessary.
 4. Perform fast demonstration of the task performance.
- **Provide trainees the opportunity to practice the task performance demonstrated.**
 1. Provide trainees to have guided practice
 2. Create environment for practicing the demonstrated task performance
 3. Guide the trainees in each and every step of task performance
 4. Provide trainees the opportunity to repeat & re-repeat as per the need to be proficient on the given task performance
 5. Switch to another task demonstration if and only if the trainees developed proficiency in the given task performance

Other suggestions

1. Apply principles of skill training
2. Allocate 20% time for theory and 80% time for task performance while delivering instruction / training.
3. Apply principles of adult learning.
4. Apply principles of intrinsic motivation
5. Facilitate maximum trainees' involvement in learning and task performance activities.
6. Instruct the trainees on the basis of their existing level of knowledge, skills & attitudes.

Course structure

| S.N. | Module/sub-module | Time (Hours) | | |
|----------|---|--------------|------------|------------|
| | | Theory | Practical | Total |
| 1 | Introduction | 6 | 24 | 30 |
| 2 | Garden designing | 20 | 80 | 100 |
| | 1.1 Designing a typical garden | 3 | 12 | 15 |
| | 1.2 Designing Outdoor garden | 11 | 44 | 55 |
| | 1.3 Designing indoor gardens | 6 | 24 | 30 |
| 3 | Landscape garden designing | 14 | 56 | 70 |
| | 3.1 Principles of landscape designing | 2 | 8 | 10 |
| | 3.2 Residential landscape designing | 8 | 30 | 38 |
| | 3.3 Public landscape designing | 4 | 18 | 22 |
| 4 | Designing parks and recreational areas | 5 | 20 | 25 |
| 5 | Designing public garden | 10 | 45 | 55 |
| 6 | Computer application in garden designing | 12 | 48 | 60 |
| 7 | Management activities | 2 | 8 | 10 |
| | 7.1 Managing garden designing activities | 1 | 2 | 3 |
| | 7.2 Marketing | 1 | 2 | 3 |
| | 7.3 Communication | 1 | 2 | 3 |
| | 7.4 Professional development | 1 | 2 | 3 |
| 8 | Entrepreneurship development | 8 | 32 | 40 |
| | Total In house Training | 78 | 312 | 390 |
| | On the Job training | | 160 | 160 |
| | Total | 91 | 440 | 550 |

Details of Modules and Sub-Modules

| Task No. | Module No. | Title of Module/Sub-Module /Tasks | Time in hours |
|----------|------------|--|---------------|
| | 1 | Introduction | 30 |
| | 2 | Garden designing | 100 |
| | | 2.1 Designing a typical garden | 15 |
| 1. | | 1. Observe site | 1 |
| 2. | | 2. Measure the site | 2 |
| 3. | | 3. Prepare a site map | 3 |
| 4. | | 4. Prepare design of a garden | 3 |
| 5. | | 5. Prepare proposal of a garden development | 4 |
| 6. | | 6. Present proposal of a garden development | 2 |
| | | 2.2 Designing Outdoor garden | 55 |
| 7. | | 1. Design Mugal garden | 3 |
| 8. | | 2. Design English garden | 3 |
| 9. | | 3. Design Japanese garden | 3 |
| 10. | | 4. Design Cottage garden | 3 |
| 11. | | 5. Design Korean garden | 3 |
| 12. | | 6. Design Chinese garden | 3 |
| 13. | | 7. Design rock garden | 3 |
| 14. | | 8. Design patio garden | 2 |
| 15. | | 9. Design water garden | 2 |
| 16. | | 10. Design hanging garden | 2 |
| 17. | | 11. Design sun vs. shade garden | 2 |
| 18. | | 12. Design mixed garden | 2 |
| 19. | | 13. Design freestyle garden | 2 |
| 20. | | 14. Design Bonsai | 2 |
| 21. | | 15. Design herb garden | 2 |
| 22. | | 16. Design vegetable garden | 2 |
| 23. | | 17. Design fruit garden | 2 |
| 24. | | 18. Design kitchen garden | 2 |
| 25. | | 19. Design flower garden | 2 |
| 26. | | 20. Design tea garden | 2 |
| 27. | | 21. Design therapeutic garden | 2 |
| 28. | | 22. Design Cactus garden | 2 |
| 29. | | 23. Design orchid garden | 2 |
| 30. | | 24. Design Rose garden | 2 |
| | | 2.3 Designing indoor gardens | 30 |
| 31. | | 1. Select spaces / places/location for indoor gardening | 2 |
| 32. | | 2. Select plants for indoor gardening | 4 |
| 33. | | 3. Select pots / containers / plant furniture for indoor gardening | 3 |
| 34. | | 4. Identify types of indoor gardens | 2 |

| | | | |
|-----|----------|---|-----------|
| 35. | | 5. Design bowl and dish garden | 3 |
| 36. | | 6. Design window garden | 4 |
| 37. | | 7. Design table garden | 4 |
| 38. | | 8. Design terrariums | 4 |
| 39. | | 9. Design bottle garden | 4 |
| | 3 | Landscape garden designing | 70 |
| | | 3.1 Principles of landscape designing | 10 |
| 40. | | 1. Examine basic principles of landscape design | 2 |
| 41. | | 2. Apply principal of unity | 1 |
| 42. | | 3. Apply principal of balance | 1 |
| 43. | | 4. Apply principal of accent | 1 |
| 44. | | 5. Apply principal of focalization | 1 |
| 45. | | 6. Apply principal of scale | 1 |
| 46. | | 7. Apply principal of proportion | 1 |
| 47. | | 8. Apply principal of harmony | 1 |
| 48. | | 9. Apply principal of rhythm | 1 |
| | | 3.2 Residential landscape designing | 38 |
| 49. | | 1. Prepare topographical map | 4 |
| 50. | | 2. Assess the garden site | 3 |
| 51. | | 3. Assess needs/ interest of the family | 3 |
| 52. | | 4. Identify divisions of the residential landscape space | 4 |
| 53. | | 5. Identify composition of the volume of residential landscape | 4 |
| 54. | | 6. Put the landscape plan into paper | 4 |
| 55. | | 7. Design public space | 4 |
| 56. | | 8. Design service space | 4 |
| 57. | | 9. Design private outer leaving space | 4 |
| 58. | | 10. Design landscape for corporate buildings and housing colony | 4 |
| | | 3.3 Public landscape designing | 22 |
| 59. | | 1. Design landscape for public buildings | 4 |
| 60. | | 2. Design landscape for hospitals | 4 |
| 61. | | 3. Design landscape for school | 4 |
| 62. | | 4. Design landscape for industrial areas | 4 |
| 63. | | 5. Design landscape for city road garden | 6 |
| | 4 | Designing parks and recreational areas | 25 |
| 64. | | 1. Design parks | 8 |
| 65. | | 2. Design botanical gardens | 9 |
| 66. | | 3. Design zoological gardens | 8 |
| | 5 | Designing public space | 55 |
| 67. | | 1. Introduce public garden | 1 |
| 68. | | 2. Design entrance(s) for public garden | 2 |
| 69. | | 3. Design exit(s) of public garden | 2 |
| 70. | | 4. Design fence of public garden | 2 |
| 71. | | 5. Design visitor-use-components for public garden | 2 |
| 72. | | 6. Design lawns for public garden | 3 |
| 73. | | 7. Design paths for public garden | 3 |

| | | | |
|-----|----------|--|------------|
| 74. | | 8. Design flower beds for public garden | 3 |
| 75. | | 9. Design location for trees / shrubs / climbers for public garden | 3 |
| 76. | | 10. Design hedges for public garden | 3 |
| 77. | | 11. Design water supply in public garden | 3 |
| 78. | | 12. Prepare complete plan / design of a public garden | 4 |
| 79. | | 13. Construct public gardens | 18 |
| 80. | | 14. Maintain public gardens | 6 |
| | 6 | Computer application in garden designing | 60 |
| 81. | | 1. Apply computer in garden designing | 30 |
| 82. | | 2. Design various gardens in computer | 30 |
| | 7 | Management activities | 10 |
| 83. | | 1. Manage garden designing activities | 3 |
| 84. | | 2. Market garden designing skills | 2 |
| 85. | | 3. Communicate with others | 2 |
| 86. | | 4. Develop professionalism | 2 |
| | 8 | Entrepreneurship development | 40 |
| | | Total | 390 |
| | | On the Job training | 160 |
| | | Grand Total | 550 |

Task Analysis

Module: 1 Introduction

Description:

This module deals with introduction to garden, garden designing and garden classification.

Objective:

After completion of this module the trainees will be able to:

- Introduce garden and garden designing
- Classify the gardens

Contents:

1. Introduction to garden
 - Definition
 - Evolution
 - Scope and Importance
 - Common features
 - Advantages
 - Soil, climate, light, irrigation requirement
 - Materials for garden
2. Introduction to garden designing
 - Definition
 - Importance
 - Advantages
3. Classification of garden based on:
 - Purpose
 - Location
 - Plant type
 - Features
 - Value
 - Size
 - Features of different types of garden
4. Identification of ornamental plants
 - Botanical classification of plants
 - Botanical features of plants
 - Types and characteristics Common shrubs.
 - Types and characteristics Common climbers.

Module: 2 Garden Designing

Description:

This module includes knowledge and skills related to different types of garden designing.

Objective:

After completion of this module the trainees will be able to:

- Design typical garden
- Design outdoor garden
- Design indoor gardens

Sub modules:

1.1 Designing a typical garden

1.3 Designing Outdoor garden

1.4 Designing indoor gardens

Sub module 1.1: Designing a typical garden

Description:

This consists of skills and knowledge related to typical garden designing.

Objectives:

After its completion the trainees will be able:

- To prepare site map for typical garden design
- To design a typical garden as per the given situation
- To present proposal for typical garden development as per design

Tasks:

1. Observe site
2. Measure site
3. Prepare a site map
4. Prepare a design of a garden
5. Prepare proposal
6. Present proposal

| Task 1: Observe site | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Go to the site where the garden is to be developed 3. Observe the condition of site in terms of : <ul style="list-style-type: none"> • Water logging • Sun shine • facing • Sloping • Climate • Soil condition, and • Vegetation • Availability of irrigation or water source 4. Take precautions 5. Prepare report 6. Keep record | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Observe site</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Prescribed criteria for observing site for the garden development • Keeping record of all the conditions of the site • Precautions to be taken |
| <p>Tools /materials/equipment: Note book, pen, pencil and eraser, Site for garden development</p> | <p>Safety/precautions: Do not forget to take every related information</p> | |

| Task 2: Measure the site | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Collect tools and equipment 3. Go on the spot 4. Sketch roughly its shape on the paper 5. Measure its length, breadth and diagonals 6. Write the measurements on length, breadth and diagonal 7. Take precautions 8. Prepare report 9. Keep record | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Measure the site</p> <p>Standard (How well): The site is measured in accordance with the given scale.</p> | <ul style="list-style-type: none"> • Measurement system • Measurement methods • Precautions to be taken • Keeping records |
| <p>Tools /materials/equipment: Measuring tape, paper sheet pencil, eraser and clipboard</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Measure every nook and corner • Do not forget to measure diagonal | |

| Task 3: Prepare a site map | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Take tools and equipment 3. Decide the scale of the map e.g. 1 inch: 8 ft 4. Draw the site map with the measurements taken 5. Take precautions 6. Prepare final map 7. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Prepare a site map</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept of site map • Method of drawing a map of the site • Scale of the map • Precautions to be followed. • Records keeping |
| <p>Tools /materials/equipment: Scale, drawing sheet, graph paper, clipboard, pencil and eraser</p> | <p>Safety/precautions: Measure scale should be in exact scale</p> | |

| Task 4: Prepare design of a garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Discuss with the owners regarding the garden to be designed 3. Make a want list of owners regarding the garden design 4. Make a list of the garden features 5. Select plant species 6. Decide garden features to be designed consulting with the owner / client 7. Make drawing and locate the position of different features of the garden according to the site condition and interest, needs, and requirements of the owner 8. Make list of the plants with their number to be planted 9. Use appropriate symbols on the drawing 10. Mention the legend on the design carefully 11. Prepare a tentative cost estimate for developing the proposed garden 12. Take precautions 13. Prepare report 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Prepare design of a garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Components of garden • Principles and procedures of preparing a garden design • Method of drawing each component of garden on the map according to the scale • Keeping the legend on map • Method of preparing a tentative estimate for developing the proposed garden • Precautions to be taken • Keeping records |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <p>Discuss in details with owners/clints at the beginning of task. Consider the location, purpose, features, soil and climatic condition and principle of garden designing.</p> | |

| Task 5: Prepare proposal of a garden development | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Discuss with the owners regarding the garden to be develop as per designed 3. Make a want list of owners regarding the garden design 4. Prepare cost estimate 5. Write background 6. Write introduction 7. Write objective 8. Write activities 9. Prepare cost summary chart 10. Write conclusion 11. Prepare Action plan 12. Take precautions 13. Prepare final draft proposal 14. Review once in depth 15. Make correction and prepare final copy 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Prepare proposal of a garden development</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Purpose • Aim and objective • Components of garden • Principles and procedures of preparing a proposal • Component of proposal • Precautions to be taken • Keeping records |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <p>Discuss in details with owners/clients at the beginning of task. Consider the location, purpose, features, soil and climatic condition and principle of garden designing.</p> | |

| Task 6: Present proposal of a garden development | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Discuss with the owners regarding the garden to be develop as per proposal 3. Prepare slides in power point or in chart paper 4. Slides of introduction 5. Slide of objective 6. Slide of activities 7. Slide of a whole design 8. Slide of summary cost 9. Prepare presentation stage/table 10. Greet the audience 11. Present each slide step by step with justification and brief explanation. 12. Summarize the proposal 13. Ask for any clarification/justification 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Present proposal of a garden development</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Purpose • Aim and objective • Components of garden • Component of proposal • Audience behavior • Precautions to be taken • Keeping records |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <p>Discuss in details with owners/clients at the beginning of task. Consider the location, purpose, features, soil and climatic condition and principle of garden designing.</p> | |

Sub module 1.2: Designing Outdoor garden

Description:

This consists of skills and knowledge related to designing of outdoor gardens.

Objectives:

After its completion, the trainees will be able:

- To design different types of garden.
- To prepare proposal for designing various outdoor gardens.

Tasks:

1. Design Mughal garden
2. Design English garden
3. Design Japanese garden
4. Design Cottage garden
5. Design Korean garden
6. Design Chinese garden
7. Design free style garden
8. Design Rock garden
9. Design Patio garden
10. Design Water garden
11. Design Hanging garden
12. Design Mixed garden
13. Design Sun VS shade garden
14. Design Bonsai
15. Design Herb garden
16. Design Vegetable garden
17. Design Fruit garden
18. Design Kitchen garden
19. Design Flower gardens
20. Design Tea garden
21. Design Therapeutic garden
22. Design Cactus garden
23. Design Orchid garden
24. Design Rose garden

| Task 1: Design Mugal garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Mugal garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <p>Discuss in details with owners/clients at the beginning of task. Consider the location, purpose, features, soil and climatic condition and principle of garden designing.</p> | |

| Task 2: Design English garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design English garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <p>Discuss in details with owners/clients at the beginning of task. Consider the location, purpose, features, soil and climatic condition and principle of garden designing.</p> | |

| Task 3: Design Japanese garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Japanese garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clints at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 4: Design Cottage garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Cottage garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen, and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 5: Design Korean garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Korean garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clints at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 6: Design Chinese garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Chinese garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 7: Design rock garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design rock garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 8: Design patio garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design patio garden.</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 9: Design water garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design water garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 10: Design hanging garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design hanging garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 11: Design sun vs. shade garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design sun vs. shade garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment: Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 12: Design mixed garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design mixed garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment: Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 13: Design freestyle garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare want list of owners 3. Prepare list of garden features 4. Select plant species 5. Prepare drawing with different features as per site. 6. Prepare required plant list. 7. Use symbols on the drawing 8. Mention the legend on the design. 9. Estimate cost as per design. 10. Prepare report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design freestyle garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Objectives • Features • Components • Principles • Concept of scale • Principles of cost estimate • Precautions to be taken • Records and reports |
| <p>Tools /materials/equipment:</p> <p>Paper sheet, ruler, scale, clipboard, pencil, eraser, drawing pen and poster color</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Discuss in details with owners/clients at the beginning of task. • Consider the location, purpose, features, soil and climatic condition and principle of garden designing. | |

| Task 14: Design Bonsai | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Discuss with the client regarding the design of bonsai 3. Collect tools / materials needed 4. Enlist characteristics of Bonsai 5. Identify plants used for preparing bonsai 6. Design the design of different plants as per the demand 7. Prepare report 8. Follow precautions 9. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Bonsai</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Characteristics • Importance • Objectives • Features • Components • Principles • Scope • Uses • Types • Precautions to be taken • Records and reports |

| Task 15: Design herb garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Explain characteristics of herb gardening 3. List culinary herbs 4. Observe site 5. Measure the site 6. Prepare a site map 7. Prepare design for herb gardening: <ul style="list-style-type: none"> • Discuss with the owners • Make a want list of owners • Apply principles of herbal garden design • Select plant species • Make drawing and locate the position of different features of the garden according to the site condition and interest/needs/requirements of the owner / client on the map. • Make list of the plants with their number to be planted • Use symbols on the drawing • Mention the legend 8. Prepare cost estimate 9. Take precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design herb garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Principles • Importance, • Soil and climate, • Weather and its elements of Culinary herbs • Uses and importance, soil and climatic, propagation, cultivation practices for listed herbs. (¹Attach list) • Criteria of site selection and land measurement • Principles of herbal garden design • Cost estimation • Precautions to be taken • Records keeping and report |
| Tools /materials/equipment: | Safety/precautions: | |
| Paper, pencil, scale, drawing board and table | <ul style="list-style-type: none"> • Determine scale, use symbols, and mention legends. | |

▪ ¹ List of common herbs (Rose Mary, Tarragon, Leek, Sweet Marjoram, Lemon, grass, Lemon balm, Oregano, Lavender, Basil, Sage, Chive, Garlic, Dill, Pennell etc)

| Task 16: Design vegetable garden | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist the crops for vegetable gardening 3. Observe site (In terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation) 4. Measure the site. 5. Prepare a site map 6. Prepare design 7. Discuss with the owners 8. Make a want list of owners 9. Make a list of the garden features 10. Select plant species 11. Decide garden features to be designed consulting with the owner / client 12. Make drawing and locate the position of different features of the garden 13. Make list of the plants with their number to be planted 14. Use symbols on the drawing 15. Mention the legend 16. Prepare cost estimate 17. Prepare report 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design vegetable garden.</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance, • Soil and Climate • Summer vegetable garden • Winter vegetable garden • Off-season vegetable garden • Organic vegetable garden • Principle of “never use chemicals” • Criteria of site selection and land measurement • Principles of vegetable garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of vegetable garden design | |

| Task 17: Design fruit garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist the crops for fruit gardening 3. Observe site (In terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation) 4. Measure the site. 5. Prepare a site map 6. Prepare design 7. Discuss with the owners 8. Make a want list of owners 9. Make a list of the garden features 10. Select plant species 11. Decide garden features to be designed consulting with the owner / client 12. Make drawing and locate the position of different features of the garden 13. Make list of the plants with their number to be planted 14. Use symbols on the drawing 15. Mention the legend 16. Prepare cost estimate 17. Prepare report 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design fruit garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance, • Soil and Climate • Principle of “never use chemicals” • Criteria of site selection and land measurement • Principles of fruit garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of fruit garden design | |

| Task 18: Design kitchen garden | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist the crops for fruit gardening 3. Observe site (In terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation) 4. Measure the site. 5. Prepare a site map 6. Prepare design 7. Discuss with the owners 8. Make a want list of owners 9. Make a list of the garden features 10. Select plant species 11. Decide garden features to be designed consulting with the owner / client 12. Make drawing and locate the position of different features of the garden 13. Make list of the plants with their number to be planted 14. Use symbols on the drawing 15. Mention the legend 16. Prepare cost estimate 17. Prepare report 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design kitchen garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • _Concept • Importance, • Soil and Climate • Criteria of site selection and land measurement • Principles of kitchen garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of kitchen garden design | |

| Task 19: Design flower garden | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe site (In terms of water logging, sun shine, and facing, sloping, climate and soil condition. 3. Measure the site. 4. Prepare a site map 5. Prepare design 6. Discuss with the owners 7. Make a want list of owners 8. Make a list of the garden features 9. Select plant species 10. Decide garden features to be designed consulting with the owner / client 11. Make drawing and locate the position of different features of the garden 12. Make list of the plants with their number to be planted 13. Use symbols on the drawing 14. Mention the legend 15. Prepare cost estimate 16. Prepare report 17. Take precautions 18. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design flower garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/Concept • Importance • Types • Ornamental plants for flower gardening and their varieties • Criteria for site selection • Principles of flower garden design • Cost estimation for flower gardening • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of flower garden design | |

| Task 20: Design tea garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe site (In terms of water logging, sun shine, and facing, sloping, climate and soil condition. 3. Measure the site. 4. Prepare a site map 5. Prepare design 6. Discuss with the owners 7. Make a want list of owners 8. Make a list of the garden features 9. Select plant species 10. Decide garden features to be designed consulting with the owner / client 11. Make drawing and locate the position of different features of the garden 12. Make list of the plants with their number to be planted 13. Use symbols on the drawing 14. Mention the legend 15. Prepare cost estimate 16. Prepare report 17. Take precautions 18. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design tea garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/Concept • Importance • Plants and their varieties • Criteria for site selection • Principles of tea garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of tea garden design | |

| Task 21: Design therapeutic garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe site (In terms of water logging, sun shine, and facing, sloping, climate and soil condition. 3. Measure the site. 4. Prepare a site map 5. Prepare design 6. Discuss with the owners 7. Make a want list of owners 8. Make a list of the garden features 9. Select plant species 10. Decide garden features to be designed consulting with the owner / client 11. Make drawing and locate the position of different features of the garden 12. Make list of the plants with their number to be planted 13. Use symbols on the drawing 14. Mention the legend 15. Prepare cost estimate 16. Prepare report 17. Take precautions 18. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design therapeutic garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Use • Plants and their varieties • Criteria for site selection • Principles of therapeutic garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of therapeutic garden design | |

| Task 22: Design Cactus garden | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe site (In terms of water logging, sun shine, and facing, sloping, climate and soil condition. 3. Measure the site. 4. Prepare a site map 5. Prepare design 6. Discuss with the owners 7. Make a want list of owners 8. Make a list of the garden features 9. Select plant species 10. Decide garden features to be designed consulting with the owner / client 11. Make drawing and locate the position of different features of the garden 12. Make list of the plants with their number to be planted 13. Use symbols on the drawing 14. Mention the legend 15. Prepare cost estimate 16. Prepare report 17. Take precautions 18. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Cactus garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Importance • Use • Plants and their varieties • Criteria for site selection • Principles of Cactus garden design • Cost estimation • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of Cactus garden design | |

| Task 23: Design orchid garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define orchid garden / gardening 3. List types of orchid 4. Identify varieties of orchids 5. Observe site for orchid gardening (water logging, sun shine, facing, sloping, climate, soil condition and vegetation) 6. Measure the site 7. prepare rough Sketch 8. Prepare a site map: 9. Prepare design/plan 10. Make a want list of owners 11. Make a list of the garden features 12. Apply principles of orchid garden design 13. Select plant species 14. Maintain color and height combination 15. Make drawing 16. Make list of the plants with their number 17. Use symbols on the drawing 18. Mention the legend 19. Prepare cost estimate 20. Take precautions 21. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design orchid garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept and definition • Scope and Importance • Climatic requirement • Types/varieties of orchids • Characteristics • Criteria for site selection • Principles of orchid garden design • Cost estimation • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of orchid garden design | |

| Task 24: Design Rose garden | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define rose garden / gardening 3. List types and varieties of rose 4. Observe site for rose gardening (water logging, sun shine, facing, sloping, climate, soil condition and vegetation) 5. Measure the site 6. prepare rough Sketch 7. Prepare a site map: 8. Prepare design/plan 9. Make a want list of owners 10. Make a list of the garden features 11. Apply principles of rose garden design 12. Select plant species 13. Maintain color combination 14. Make drawing 15. Make list of the plants with their number 16. Use symbols on the drawing 17. Mention the legend 18. Prepare cost estimate 19. Take precautions 20. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design Rose garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept and definition • Scope and Importance • Soil and Climatic requirement • Types/varieties of rose • Characteristics • Color combination • Criteria for site selection • Principles of rose garden design • Cost estimation • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table.</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Apply principles of rose garden design | |

Sub module 1. 3: Designing indoor gardens

Description:

This consists of skills and knowledge related to designing of indoor gardens.

Objectives:

After its completion, the trainees will be able:

- To design indoor gardens.
- To prepare proposals for designing indoor gardens

Tasks:

1. Select spaces / places / location for indoor gardening
2. Select plants for indoor gardening
3. Select pots / containers / plant furniture for indoor gardening
4. Identify types of indoor gardens
5. Design bowl and dish garden
6. Design window garden
7. Design table garden
8. Design terrariums
9. Design bottle garden

| Task 1: Select spaces / places/location for indoor gardening | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit buildings 3. Observe spaces for indoor gardening 4. Study the size, color, and style of rooms 5. Study the architectural setting and furnishing of the room 6. Identify the spaces to locate/place/display indoor plants: [Floor, window-sill, window-ledge, table, deck, book-case, shelves and trolleys, window-boxes, planters {on stand and built-in on floor or at floor level(sunken beds)}, wall brackets or plant stands placed on the floor] 7. Enlist criteria for selecting spaces/places for displaying house plants 8. Select spaces for displaying house plants 9. Take precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Select spaces / places/location for indoor gardening</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Characteristics of plants to be use in indoor garden • Criteria for selecting spaces/places for displaying house plants • Principles of color combination • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Be careful to select locations to place house plants either in suitable groups as bold accents or singly as a spotlight depending upon the size, color, and style of the room. • Select spaces / locations considering suggestions from the owner, applying creativity and principles of indoor garden design. | |

| Task 2: Select plants for indoor gardening | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Identify plants for indoor gardening with their name and characteristics 3. Enlist criteria for selecting plants for indoor gardening 4. Select plants with different characteristics 5. Select trailing or hanging plants 6. Select climbing or trellis plants 7. Select tough evergreen plants 8. Take precautions 9. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Select plants for indoor gardening</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Features • Use • Criteria for selecting plants for indoor gardening • Name (Common, Local, English and Botanical) of indoor plants • Characteristics of different indoor plants (eg: trailing or hanging plants, climbing or trellis plants, tough evergreen plants etc) • Principles of indoor gardening • Precautions |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table, sample of indoor plants</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Be careful to consigner growth habits and suitability of the plants for the particular indoors selected. • Apply principles of indoor gardening | |

Note: Indoor plants selection criteria

- Easy to manage for beginners
- For dark corner
- For north window
- For south window
- For east or west window
- Trailing or hanging plants
- Climbing or trellis plants
- Tough evergreen plants
- For terrarium, bowl, and bottle gardens
- For dish or trough gardens
- For dish or trough gardens

| Task 3: Select pots / containers / plant furniture for indoor gardening | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist types of pots/ containers / plant furniture for indoor gardening 3. Identify types of pots/ containers / plant furniture for indoor gardening: 4. list their characteristic features 5. List selection criteria for the types of pots/ containers / plant furniture for indoor gardening 6. Evaluate the types of pots/ containers / plant furniture for indoor gardening against the criteria 7. Select the types of pots/ containers / plant furniture for indoor gardening 8. Take precautions 9. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Select pots / containers / plant furniture for indoor gardening</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept, objectives, and uses of them for indoor gardening • characteristic features of various types of pots, containers, and plant furniture • Selection criteria • Types • Shapes: round, oval, elliptical, cone-shaped, rectangular, square, oblong, heart-shaped, or of any other shape • Painting and polishing • Precautions |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table, Sample of pots / containers / plant furniture for indoor gardening</p> | <p>Safety/precautions:</p> <p>Carefully select the pots, containers, and plant furniture of appropriate size, shape, color or paint and design.</p> | |

Note: Type of indoor gardening pots / containers / plant furniture :

- Glazed clay and china(porcelain)pots dishes,
- Shallow bowls, and troughs;
- Variety of pottery containers in contemporary designs available in shops;
- Earthenware pots and pans
- Metal receptacles of brass and copper
- Plastic pots, dishes, and bowls;
- Cement or wooden planters or wooden barrels;
- Wall brackets
- Metal trays
- Baskets
- Plant furniture;

| Task 4: Identify types of indoor gardens | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist types of indoor gardens 3. Identify types of indoor gardens 4. List features of window garden 5. List features of table garden 6. List features of bowl and dish garden 7. List features of terrariums 8. List features of bottle garden 9. Take precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Identify types of indoor gardens</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Uses, • Objectives. • Principles • Types, features and characters of <ul style="list-style-type: none"> ▪ Window garden ▪ Table garden ▪ Terrariums ▪ Bottle garden ▪ Bowl and dish garden • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <p>Be careful to study all aspects of each type of indoor garden.</p> | |

| Task 5: Design bowl and dish garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit indoor site 3. Observe site 4. Select locations 5. Select plants 6. Select bowls / dishes 7. Select scales 8. Prepare a rough bowl and dish garden plan 9. Draw the plan using scale 10. Locate all the components/ units/ parts in the drawing using scale 11. Discuss with the owner about design 12. Collect feedbacks from the owner about design 13. Review the design / plan 14. Finalize the design 15. Take precautions 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design bowl and dish garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Principles • Types, features and characteristics • Importance, use and scope. • Selection criteria of location, plants, bowls / dishes, scales, • Understanding the scale and drawing • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <p>Be careful to make the bowl and dish garden design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of indoor/ bowl and dish garden design</p> | |

| Task 6: Design window garden | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit indoor site 3. Observe site 4. Select locations 5. Select plants 6. Select bowls / dishes 7. Select scales 8. Prepare a rough bowl and dish garden plan 9. Draw the plan using scale 10. Locate all the components/ units/ parts in the drawing using scale 11. Discuss with the owner about design 12. Collect feedbacks from the owner about design 13. Review the design / plan 14. Finalize the design 15. Take precautions 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design window garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Principles • Types, features and characteristics • Importance, use and scope. • Selection criteria of location, plants, ng bowls / dishes, scales, • Understanding the scale and drawing • Precautions to be taken |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Be careful to make window garden design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of indoor/ window garden design.</p> | |

| Task 7: Design table garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit indoor site 3. Observe site 4. Select locations 5. Select plants 6. Select bowls / dishes 7. Select scales 8. Prepare a rough bowl and dish garden plan 9. Draw the plan using scale 10. Locate all the components/ units/ parts in the drawing using scale 11. Discuss with the owner about design 12. Collect feedbacks from the owner about design 13. Review the design / plan 14. Finalize the design 15. Take precautions 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design table garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Principles • Types, features and characteristics • Importance, use and scope. • Selection criteria of location, plants, e.g.; bowls / dishes, scales, • Understanding the scale and drawing • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <p>Be careful to make the table garden design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of table / indoor garden design.</p> | |

| Task 8: Design terrariums | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit indoor site 3. Observe site 4. Select locations 5. Select plants 6. Select bowls / dishes 7. Select scales 8. Prepare a rough bowl and dish garden plan 9. Draw the plan using scale 10. Locate all the components/ units/ parts in the drawing using scale 11. Discuss with the owner about design 12. Collect feedbacks from the owner about design 13. Review the design / plan 14. Finalize the design 15. Take precautions 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design terrariums</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Principles • Types, features and characteristics • Importance, use and scope. • Selection criteria of location, plants, e.g.; bowls / dishes, scales, • Understanding the scale and drawing • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <p>Be careful to make the terrarium design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of terrarium / indoor garden design.</p> | |

| Task 9: Design bottle garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit indoor site 3. Observe site 4. Select locations 5. Select plants 6. Select bowls / dishes 7. Select scales 8. Prepare a rough bowl and dish garden plan 9. Draw the plan using scale 10. Locate all the components/ units/ parts in the drawing using scale 11. Discuss with the owner about design 12. Collect feedbacks from the owner about design 13. Review the design / plan 14. Finalize the design 15. Take precautions 16. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design bottle garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Importance • Principles • Types, features and characteristics • Importance, use and scope. • Selection criteria of location, plants, e.g.; bowls / dishes, scales, • Understanding the scale and drawing • Precautions to be taken |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <p>Be careful to make the bottle garden design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of bottle / indoor garden design.</p> | |

Module 3: Landscape garden designing

Description:

This consists of skills and knowledge related to landscape garden designing.

Objectives:

After its completion, the trainees will be able:

- To apply principles of landscape design
- To design different landscape gardens.

Sub modules:

1. Principles of landscape designing
2. Landscape garden/lawn designing
3. Residential landscape designing
4. Public landscape designing

Sub module 3.1: Principles of landscape designing

Description:

This consists of skills and knowledge related to principles of landscape garden designing.

Objectives:

After its completion, the trainees will be able:

- To apply basic principles of landscape garden designing.

Tasks:

1. Examine basic principles of landscape design
2. Apply principle of unity
3. Apply principle of balance
4. Apply principle of accent
5. Apply principle of focalization
6. Apply principle of scale
7. Apply principle of proportion
8. Apply principle of harmony
9. Apply principle of rhythm

| Task 1: Examine basic principles of landscape design | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Obtain reading materials on principals of landscape design 3. Read the reading materials on principals of landscape design 4. Make list principals of landscape design 5. Define each principal of landscape design 6. Analyze each principal of landscape design 7. Evaluate each principal of landscape design 8. Write application of each principal of landscape design 9. Follow precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Examine basic principles of landscape design</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Basic principles of landscape design: definitions, concepts, objectives, analysis, and evaluation of the following principles: <ul style="list-style-type: none"> ▪ Principal of unity ▪ Principal of balance ▪ Principal of accent ▪ Principal of focalization ▪ Principal of scale ▪ Principal of proportion ▪ Principal of harmony ▪ Principal of rhythm • Precautions to be followed • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Needs critical analysis | |

| Task 2: Apply principal of unity | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Group / arrange / place different parts of the design so that they appear as a single unit achieving a sense of oneness 3. Make the design presenting a pleasant picture from several angles 4. Achieve unity in the design by the use of plants similar in texture, form, and color 5. Achieve unity in the design by noticeable repetition and transition from one group to another 6. Achieve unity in the design by enclosure 7. Achieve unity in the design by developing relation between the lines that create the pattern 8. Relate logically the walks, buildings, and other areas to the overall plan 9. Follow precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of unity</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition and concept • Meaning of the principle of the unity • Application of principles of unity • Relating logically the walks, buildings, and other areas to the overall plan |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • The principal of unity is violated when the walks, buildings, and other areas are not logically related to the overall plan to • Unity is not obtained when many plant and flower beds are placed on the front lawn in competition with the house or when many different ideas or accent plants are used in the same area. | |

| Task 3: Apply principal of balance | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Make equal balance on either side of any imaginary axis by exact duplication of plant material in line to achieve symmetrical balance 3. Make equal balance on either side of any imaginary axis by exact duplication of plant material in form to achieve symmetrical balance 4. Make equal balance on either side of any imaginary axis by exact duplication of plant material in color to achieve symmetrical balance 5. Achieve asymmetrical balance by dissimilar placement of unlike objects or masses on either side of any unstressed axis to create visual equilibrium 6. Follow precautions 7. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of balance</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept of balance / equilibrium • Importance of symmetrical balance / equilibrium • Importance of Asymmetrical balance / equilibrium • Methods of achieving symmetrical balance / equilibrium • Methods of achieving asymmetrical balance / equilibrium • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions: Use creativity to create balance in the design</p> | |

| Task 4: Apply principal of accent | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Obtain accent by specimen plants 3. Obtain accent by change of line 4. Obtain accent by use of water 5. Obtain accent by lighting 6. Obtain accent by variation in forms 7. Obtain accent by proper use of accessories 8. Obtain accent by contrasting colors 9. Obtain accent by contrasting textures 10. Follow precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of accent</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition, importance, and need of accent • Importance of accent by specimen plants • Importance of accent by change of line • Importance of accent by use of water • Importance of accent by lighting • Importance of accent by variation in forms • Importance of accent by proper use of accessories • Importance of accent by contrasting colors • Importance of accent by contrasting textures • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions: Without accent a design may be dull, static, and uninteresting.</p> | |

| Task 5: Apply principal of focalization | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Lead the various parts of design towards final focal point which attracts and holds the attention of viewer. 3. Achieve focalization in formal design: <ul style="list-style-type: none"> • Make a terminal feature as a focal point at the end of the axis such as a stature, birdbath, sundial, arbor pool, plant composition • Achieve focalization through central motive scheme(locating central feature of focalization at the crossing of two axis) 4. Achieve focalization in informal design: <ul style="list-style-type: none"> • Design the various parts of the composition that normally lead the eye to the final focal point of climax such as attractive groupings of garden feature or plant materials 5. Follow precautions 6. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of focalization</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition of focalization • Concept of focal point, focal point of climax, axis, and terminal feature • Importance of focalization in formal design • Importance of focalization in informal design • Concept of central motive scheme • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions: Use creativity</p> | |

| Task 6: Apply principal of scale | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Establish scale of objects by introduction of anything that shows a person's height such as steps, seats, doors, and hand rails. 3. Take into consideration the plant volume as well as the size of both foliage and blossom while establishing the scale 4. Follow precautions 5. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of scale</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept of scale as relative size of objects and plants • Importance of establishing scale of objects • Need to consider the plant volume as well as the size of both foliage and blossom while establishing the scale • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Define scale as relative size of objects and plants • Many large-leaved plants would be out of scale in a small garden as would large and heavy-looking flowers. | |

| 46. Task structure | | |
|---|---|--|
| Task 7: Apply principal of proportion | | |
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Make pleasing and proper relationship of one part of a design to another part and to the whole 3. Consider the interrelationship of the size of one part or object to another while designing a space 4. Follow precautions 5. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of proportion</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept, importance and use of the principal of proportion • Importance of pleasing and proper relationship of one part of a design to another part and to the whole • Importance and process of considering interrelationship of the size of one part or object to another while designing a space • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions:</p> <p>If any part seems large or ungainly in comparison with the rest, it will not give complete satisfaction</p> | |

| Task 8: Apply principal of harmony | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Fit various parts of composition without a clash 3. Establish harmonious relationship among all parts of the design 4. Follow precautions 5. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of harmony</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Principal of harmony: • Definition, importance, and methods of achieving harmony in a design • Importance of fitting various parts of composition without a clash • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions: A harmonious relationship among all parts of the design should be the objective while applying the principle of harmony</p> | |

| Task 9: Apply principal of rhythm | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Identify colors affecting emotion 3. Identify lines affecting stimulation and relaxation 4. Create feeling of motion as the eye is directed through the design by the introduction of repetition of elements 5. Create rhythm by repetition and transition 6. Obtain rhythm by repetition of groups or drifts of plants, by a row of trees or by steps 7. Obtain rhythm by gradual repetition of pattern and color 8. Follow precautions 9. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply principal of rhythm</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept and importance of rhythm in landscape designing • Colors affecting emotion: red-exciting; green-soothing • Lines affecting stimulation and relaxation: long, following curves-positive, soft, and pleasant; jagged, pointed lines-active and vigorous; straight lines and square corners-strong, solid, structural qualities as opposed to curved and fluid lines. • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, reading materials and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Remember there is no design without a gradual repetition of pattern and color • Remember learning to feel the rhythmic beat of color and form in design is a stimulating experience | |

Sub module 3.2: Residential landscape designing

Description:

This consists of skills and knowledge related to residential garden designing.

Objectives:

After its completion, the trainees will be able:

- To assess the garden site and interests of the family
- To put the landscape plan into paper
- To design residential landscape
- Prepare proposal for residential landscape

Tasks:

1. Read topographical map
2. Assess the garden site
3. Assess needs / interests of the family
4. Identify divisions of the residential landscape space
5. Identify composition of the volume of residential landscape space
6. Put the landscape plan into paper
7. Design public space
8. Design service space
9. Design private outer leaving space
10. Design landscape for corporate buildings and housing colony
11. Design landscape for city road garden

| Task 1: Read topographical map | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Collect topographical map of given area 3. Read the entire topographical map 4. Examine topography of the area in detail 5. Examine landscape characters of the area in detail 6. Analyze the topography of the area in detail 7. List natural features / landscape characters of the area in detail 8. Contours and other natural features 9. Existing trees 10. Street right-of-way 11. Location of good views to develop 12. Location of good views to screen 13. Take precautions 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Read topographical map</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept of topography, topographical map, and its application • Importance • Typical natural features / landscape characters • Natural resources and its importance • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table, map</p> | <p>Safety/precautions: Need a critical and detail study of the topography of the area to have an effective, beautiful, and eye catching residential landscape design</p> | |

| Task 2: Assess the garden site | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Plan to visit the site several time to learn its landscape characters 3. Go to each day to the piece of land on which the garden is to be constructed: <ul style="list-style-type: none"> • Sometimes for long hours • Sometimes in the quiet of the evening when the shadows are long • Sometimes in the busy part of the day 4. Study /analyze the bit of land in terms of its moods, limitations, and possibilities 5. Select the form and character of the garden from: <ul style="list-style-type: none"> • The site • The passing street • The fragment of rock • The wafting breeze • The arching sun • The sound of falls • The distant view 6. Assess the site in detail 7. Draw a detail plan of the garden based on the assessment 8. Complete the activity of site analysis in detail 9. Review the site map in details and incorporate the findings 10. Prepare site assessment/ analysis report 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Assess the garden site</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition and concept • Importance • Landscape characters • Moods, limitations, and possibilities of the garden site • Assessment criteria • Basis of analysis • Site assessment/ analysis report • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Be critical while assessing the site for garden. | |

| Task 3: Assess needs/ interest of the family | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Make a plan for family interview 3. Conduct interview with the family for whom the residential landscaping is concerned: <ul style="list-style-type: none"> • Ask for / learn / note down their interests / wants • Ask for / learn / note down their present / future needs • Ask for / learn / note down their recreational needs • Ask for / learn / note down the installation of major items • Ask for / learn / note down their amount of time they are willing to spend for maintaining their property 4. Get detail idea of the family for landscape scheme / plan from the family interview 5. Discuss, in detail, with the family about various items of the landscape garden they want to include. 6. Prepare a report of particular needs/ interest of the family 7. Take precautions 8. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Assess needs/ interest of the customer/owner</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Importance • Culture and religion of the family and its importance in interview • Type of interview • Question type • Needs • Analysis of needs based on the interview • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Apply interview skills tactfully and creatively.</p> | |

| Task 4: Identify divisions of the residential landscape space | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define residential landscape space 3. Divide residential landscape space into following three spaces: <ul style="list-style-type: none"> • The front or public space • The service space • The private outdoor living space 4. Enlist features of the front or public space 5. Enlist features of the service space 6. Enlist features of the private outdoor living space 7. Enlist objectives / uses of the front or public space 8. Enlist objectives / uses of the service space 9. Enlist objectives / uses of the private outdoor living space 10. Take precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Identify divisions of the residential landscape space</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Importance • Purpose/objectives • Features of The front or public space, the service space, and the private outdoor living space • Use and objectives of the front or public space, the service space, and the private outdoor living space • Criteria for division • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Mind to mention features of each space in detail.</p> | |

| Task 5: Identify composition of the volume of residential landscape space | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define residential landscape volume 3. Divide residential landscape volume into following three parts: 4. The ground 5. The verticals 6. The ceiling 7. Enlist features of the ground 8. Enlist features of verticals 9. Enlist features of the ceiling 10. Enlist objectives / uses of the ground 11. Enlist objectives / uses of the verticals 12. Enlist objectives / uses of the ceiling 13. Take precautions 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Identify composition of the volume of residential landscape space</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition of landscape volume • Parts/elements of landscape volume: the ground, verticals, and ceiling • Features of the ground, verticals, and ceiling • Objectives and uses of the ground, verticals, and ceiling • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Mind to mention features of each part / element in detail.</p> | |

| Task 6: Put the landscape plan in to paper | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Obtain site and needs / interest analysis reports 3. Prepare a plan with all of the present and future needs based on the site and needs / interest reports 4. Plot the lot on graph paper 5. Sketch rough outline of the various use areas on tracing paper 6. Rework with the general outline 7. Draw in the major areas of construction in the basic plan 8. Choose specific variety of plant 9. Place trees in the design 10. Place shrubs in the design 11. Place ground cover in the design 12. Use proper symbols and legends 13. Complete the preparation of the basic plan for the residential landscape design 14. Take precautions 15. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Put the landscape plan into paper</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Principles • Criteria • scale • Plotting the graph • Symbols and legends • Criteria for choosing specific variety of plants (trees, shrubs, ground cover etc.) from within the general classification • Specific variety of plant • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Graph paper, tracing paper, pencil, scale, eraser, drawing board / table and other necessary tools</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Indicate temporary surfaces, such as grass or pine needles, in the location of future needs [for example-of swimming pool, patio etc.] • Everything should be for the convenience of the homeowner. | |

| Task 7: Design public space | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define public space 3. List basic parts of the public space 4. Plan location of / design basic parts of the public space <ul style="list-style-type: none"> • Plan the location of / design the drive way system • Plan the location of / design the walk ways • Plan location of / design the entry way 5. Design / locate foundation planting 6. Design / locate ground cover 7. Design / locate yard 8. Design terraces or decks 9. Design / locate screening 10. Design / locate lawn 11. Design / locate flower beds 12. Design / locate birdbath 13. Take precautions 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design public space</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition and concept of public space • Basic parts of the public space and their design: <ul style="list-style-type: none"> ▪ The drive way system ▪ Walk ways ▪ Entry way • Features and criteria for design and location of <ul style="list-style-type: none"> ▪ Foundation planting ▪ Ground cover ▪ Yard ▪ Terraces or decks ▪ Screening ▪ Lawn ▪ flower beds ▪ birdbath • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Be careful not to design a public area that will require more care than the homeowner is willing to give</p> | |

| Task 8: Design service space | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Include the followings in the service area: <ul style="list-style-type: none"> • Garbage cans • Clothes lines • Dog run • Woodpile • Storage for garden equipment/ implement • Boats • Trailers 3. Locate service space where it is screened from: <ul style="list-style-type: none"> • Street • Neighbor's view • Outdoor living area 4. Locate service space where it is convenient to the kitchen and outside entrance 5. Place woodpile convenient to the room containing the fire place 6. Select screening 7. Use a fence to screen the area from the neighbors 8. Use plants to block the view from the private and outdoor living space 9. Locate the screening with walls or fences or plants or combination of these 10. Plan/design the service area as small as possible yet large enough to serve its purpose 11. Take precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design service space</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept and use of service area • The service area and its location • Possible items in the service area • Service area screening criteria. • Principles and procurers for planning and designing the service area • Shape and size of service area. • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Make the design of the service space attractive, beautiful, eye catching, as small as possible yet large enough applying creativity. | |

| Task 9: Design private outer leaving space | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Design / locate fencing or enclosure 3. Design/locate deck under or around an existing shade tree 4. Determine the design of living area. 5. Design/locate a play yard with swings and sandbox, circular hard-surfaced track for riding toys, and soft ground under swings and play 6. Design / locate large lawn for outer games 7. Design / locate swimming pool 8. Design / locate kitchen 9. Design / locate bathroom 10. Design / locate protective fencing 11. Design / locate vegetable garden 12. Design / locate cut flower garden 13. Design / locate herb garden 14. Design / locate space for entertaining: <ul style="list-style-type: none"> • Design / locate a terrace • Design / locate a patio • Design / locate a wooden deck • Design / locate simply an open space of lawn 15. Design / locate partially covered shade area 16. Design / locate screen of specimen trees 17. Design / locate rows of trees and shrubs 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design private outer leaving space</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition, objectives, and use of the private outer leaving space • Principles of designing the private outer leaving space • Components and their characteristics and needs. • Importance of different components. • Different situations and needs of family. • Needs of different age group of people/family member • Criteria for locating different components. • Principles of designing different components. |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Be careful to determine the design of living area on the basis of the requirements of the situation, recreational needs of the family, and changing ages of children</p> | |

| Task 10 : Design landscape for corporate buildings and housing colony | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Obtain design of public space prepared 3. Obtain design of service space prepared 4. Obtain design of private outdoor living space prepared 5. Compile the three designs 6. Discuss with the owner 7. Get feedbacks 8. Review the compiled design 9. Finalize the design 10. Take precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design residential landscape</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Introduction/definition and concepts • Designing principles • Different components and their Characteristics. • Criteria for locating different components. • Needs of family members • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Be careful to make the design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of landscape design</p> | |

| Task 11: Design landscape for city road garden | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 12. Receive instruction 13. Observe site 14. Measure site 15. Classify the road (Primary, secondary and tertiary road) 16. Design landscape for primary road 17. Design landscape for secondary road 18. Design landscape for tertiary road 19. Compile the design 20. Prepare cost estimate 21. Identify the required materials 22. Prepare cost estimate 23. Prepare proposal 24. Take precautions 25. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design landscape for city road garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Introduction/definition and concepts • Designing principles • Different components and their Characteristics. • Criteria for locating different components. • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment: Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions: Be careful to make the design attractive, beautiful, and eye catching applying creativity, suggestion from the owner, and principles of landscape design.</p> | |

Sub module 3.3: Public landscape designing

Description:

This consists of skills and knowledge related to public landscape garden designing.

Objectives:

After its completion, the trainees will be able:

- To oversight the topography of public area for landscape designing
- To Design landscape for different public areas
- To prepare proposal as per design

Tasks:

1. Design landscape for public buildings
2. Design landscape for hospitals
3. Design landscape for schools
4. Design landscape for industrial areas
5. Design landscape for corporate buildings and housing colony

| Task 1: Design landscape for public buildings | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit public building site 3. Measure public, service, and private areas 4. Plan / design public space/area of public building <ul style="list-style-type: none"> • Plan/design access to the public buildings • Plan/design parking area • Plan/design the walkways and entrances to the structures 5. Plan / design service space/area of public building 6. Plan / design private space/area of public building: 7. Plan / design to plant suitable shed trees around the public building 8. Plan/design for waste disposal system 9. Discuss with the public building personnel 10. Get feedbacks from the public building personnel 11. Review/ finalize the design 12. Take precautions/ keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design landscape for public buildings</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Objectives • Needs/importance and objectives of three areas around public building: public, service, and private • Other important components in public buildings • Characteristics and features of major components • Criteria for locating different components • Precautions |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Understand how public use and value the spatial environment is the key to planning sites that fit human/their purposes. • Realize the relation of nature to human/public happiness and health when designing the garden. | |

| Task 2: Design landscape for hospitals | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. visit hospital site 3. Measure for public, service, and private areas 4. Plan / design public space/area of hospital: 5. Plan / design service space/area of hospital 6. Plan / design private space/area of hospital 7. Plan / design to have plant materials to be used around the hospital building extremely durable and suitable to the location 8. Plan / design the planting area to be mulched carefully and heavily to minimize the necessity for hand weeding 9. Plan/ design lawn area to be edged around trees and planting beds to eliminate the need for hand trimming 10. Plan / design to plant suitable shed trees around the hospital building to control climate by deflecting winds and shielding summer sun 11. Plan/design for waste disposal system 12. Discuss with the hospital personnel 13. Get feedbacks from the hospital personnel 14. Review the design 15. Finalize the design 16. Take precautions 17. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design landscape for hospitals</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Importance • Major components and their • Characteristics • Features • Needs • Importance • Criteria for locating major components • Different systems in the hospital • Species for different location and components |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Note “Understanding how people/patients use and value the spatial environment is the key to planning sites that fit human/their purposes.” • Realize the relation of nature to human/patients happiness and health when designing the garden. | |

| Task 3: Design landscape for school | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. visit school site 3. Measure for public, service, and private areas 4. Plan / design public space/area of school: <ul style="list-style-type: none"> • Access to the school buildings • Plan/design parking area • Plan/design the walkways and entrances 5. Design service space/area of school: <ul style="list-style-type: none"> • Plan/design some sort of service entrances for delivery of supplies • Plan/design screening of the service area 6. Design private space/area of school: <ul style="list-style-type: none"> • Plan / design the private area/space • Plan / design play area 7. Plan / design for plant materials 8. Plan / design the planting area 9. Plan/ design lawn area 10. Plan / design to plant shed trees 11. Plan/design for waste disposal 12. Discuss with the school personnel 13. Get feedbacks from the school personnel 14. Review the design 15. Finalize the design 16. Take precautions 17. Keep records | <p>Condition (Given):</p> <p>When supervisor assigned or request from customer</p> <p>Task (What):</p> <p>Design landscape for school</p> <p>Standard (How well):</p> <p>As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Scope • Importance • Major areas and components • Characteristics of each areas • Features of each areas • Criteria for locating each area • Principals of designing each components and areas • Needs of Schools • Species of planting materials with their name (Common, English and botanical) • Special requirements if any |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Note “Understanding how people/students/parents use and value the spatial environment is the key to planning sites that fit human/their purposes.” • Realize the relation of nature to human/ students/parents happiness and health when designing the garden. | |

| Task 4: Design landscape for industrial areas | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. visit industrial area/site 3. Measure public, service, and private areas 4. Plan / design public space/area of industry: <ul style="list-style-type: none"> • Plan/design access • Plan/design parking • Plan/design the walkways and entrances 5. Plan / design service space/area of industry: <ul style="list-style-type: none"> • Plan / design some sort of service entrances for delivery • Plan/design screening of the service area 6. Plan / design private space/area of industry: <ul style="list-style-type: none"> • Plan / design the private area/space 7. Plan / design to have plant materials 8. Plan / design the planting area 9. Plan/ design lawn area 10. Plan / design to plant shed trees 11. Plan/design for waste disposal system 12. Discuss with the industry personnel. 13. Get feedbacks from the industry personnel. 14. Review the design 15. Finalize the design 16. Take precautions 17. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design landscape for industrial areas</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Scope • Importance • Major areas and components • Characteristics of each areas • Features of each areas • Criteria for locating each area • Principals of designing each components and areas • Needs of industry • Species of planting materials with their name (Common, English and botanical) • Special requirements if any |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Note “Understanding how people/ industrial staff and workers use and value the spatial environment is the key to planning sites that fit human/their purposes.” • Realize the relation of nature to human/ industrial staff and workers happiness and health when designing the garden. | |

Module 4: Designing parks and recreational areas

Description:

This consists of skills and knowledge related to designing gardens for parks and recreational areas.

Objectives:

After its completion, the trainees will be able:

- To oversight the area for designing park recreational area.
- Design parks and recreational areas
- To prepare proposal as per design

Tasks:

1. Designing parks
2. Designing botanical gardens
3. Designing zoological gardens

| Task 1: Design parks | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define park 3. Identify types of park 4. list components/ parts / units /spaces of a typical park 5. Observe site for park and examine the condition in terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation 6. Measure the site for park designing 7. Prepare a site map Prepare design/plan 8. Discuss with the owners Make a want list of client 9. Make a list of the park features 10. Apply principles of park design 11. Select plant materials, structures, and structural materials for parks 12. Decide park features to be designed consulting with the client 13. Prepare cost estimate for developing the proposed park 14. Take precautions 15. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design parks</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition and concept • Types of park • Objectives, importance, and uses of parks • Components / parts / units /spaces of a typical park • Plant materials, structures, and structural materials for parks • Measurement • Site map, scale of drawing and drawing the site map • Park planning and designing: • Principle, techniques, methods/processes and practices • Cost estimations • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Use creativity • Determine scale, use symbols, and mention legends. | |

| Task 2: Design botanical garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Define botanical garden 3. Identify types of botanical garden list components/ parts / units /spaces of botanical garden 4. Observe site for park and examine the condition in terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation 5. Measure the site 6. Prepare a site map Prepare design/plan 7. Discuss with the owners Make a want list of client 8. Make a list of the botanical garden features 9. Apply principles of botanical garden 10. Select plant materials, structures, and structural materials 11. Decide park features to be designed consulting with the client 12. Prepare cost estimate for developing the proposed park 13. Take precautions 14. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design botanical garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition and concept • Types of botanical garden • Objectives, importance, and uses of botanical garden • Components / parts / units /spaces of botanical garden • Plant materials, structures, and structural materials for botanical garden • Measurement • Site map, scale of drawing and drawing the site map • Park planning and designing: • Principle, techniques, methods/processes and practices • Special requirements if any • Cost estimations • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Use creativity • Apply principles of Botanical garden designing • Determine scale, use symbols, and mention legends. | |

| Task 3: Design zoological garden | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist features of zoological garden 3. list animals kept in zoological garden 4. list components/parts/units/spaces 5. Observe site for zoological garden 6. Assess the condition of site in terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation 7. Measure the site 8. Prepare rough Sketch 9. Prepare a site map: 10. Prepare design/plan for zoological garden 11. Discuss with the client regarding the zoological garden to be designed 12. Prepare want list of client 13. Prepare a list of the features 14. Apply principles of designing 15. Plant materials, structures, and structural materials for zoological garden except animals 16. Prepare final drawing locating different position and feature 17. Estimate list of plants 18. Use symbols on the drawing 19. Prepare cost estimate to develop the zoological garden 20. Prepare proposal 21. Take precautions 22. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design zoological garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Objectives • Importance and uses • Types • Components • Animals, plant materials, structures, and structural materials • Principle • Availability • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> ▪ Determine scale, use symbols, and mention legends. ▪ Apply principles of zoological garden designing | |

| Task 4: Select animals for zoological garden in coordination with wild life experts/Zoologist | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Enlist features of zoological garden 3. list animals kept in zoological garden 4. list components/parts/units/spaces 5. Observe site for zoological garden 6. Assess the condition of site in terms of water logging, sun shine, facing, sloping, climate, soil condition and vegetation 7. Measure the site 8. Prepare rough Sketch 9. Prepare a site map: 10. Prepare design/plan for zoological garden 11. Discuss with the client regarding the zoological garden to be designed 12. Prepare want list of client 13. Prepare a list of the features 14. Apply principles of designing 15. Select animals and related materials, structures, and structural materials for zoological garden 16. Prepare final drawing locating different position and feature 17. Estimate list of animals 18. Use symbols on the drawing 19. Prepare cost estimate to develop the zoological garden 20. Prepare proposal 21. Take precautions 22. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design zoological garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Objectives • Importance and uses • Types • Components • Animals • Nature of animals • Principle • Availability • Precautions to be taken • Records keeping |
| <p>Tools /materials/equipment:</p> <p>Paper, pencil, scale, drawing board and table</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> ▪ Determine scale, use symbols, and mention legends. ▪ Apply principles of zoological garden designing | |

Module 5: Designing public garden

Description:

This consists of skills and knowledge related to designing garden for public space.

Objectives:

After its completion, the trainees will be able:

- To design public garden
- Prepare and present proposal.
- Construct public garden.

Tasks:

1. Identify the purpose / limitations of public gardens
2. Design entrance(s)
3. Design exit(s)
4. Design fence(s)
5. Design visitor-use-components
6. Design lawns
7. Design paths
8. Design flower beds
9. Design location for trees / shrubs / climbers
10. Design hedges
11. Design water supply
12. Prepare complete plan / design of a public garden
13. Construct public gardens
14. Maintain public gardens

| Task 1: Identify the purpose / limitations/ importance/types of public gardens | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Obtain related learning materials 3. Study the learning materials 4. Visit and observe at least three public garden 5. Assess the purpose, limitations, importance, and types by visiting 6. Analyze purpose of public gardens 7. Enlist purpose of public gardens 8. Analyze limitations of public gardens 9. Enlist limitations of public gardens 10. Enlist importance of public gardens 11. Enlist types of public gardens 12. Follow precautions 13. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Identify the purpose / limitations / importance / types of public gardens</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition of public gardens • Types of public garden • Importance of public gardens • Purpose of public gardens • Limitations of public gardens • Components • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, eraser, and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Use creativity • Use standard statements accepted. | |

| Task 2: Design entrance(s) for public garden | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the site 3. Observe the site 4. Assess the overall view and components of the public garden 5. Identify the size of the area 6. Determine the number of entrances needed 7. Design controllable entrances 8. Locate the entrances in the design (map) 9. Follow precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design entrance for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Importance • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: It should be made possible to be able to control (close /open) the entrances in times of need.</p> | |

| Task 3: Design exit(s) of public garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the site 3. Observe the site 4. Assess the overall view and components of the public garden 5. Identify the size of the area 6. Determine the number of exit needed 7. Design controllable exits 8. Locate the exits in the design (map) 9. Follow precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design exit(s) of public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Importance • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: It should be made possible to be able to control (close /open) the exits in times of need.</p> | |

| Task 4: Design fence of public garden | | |
|---|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the site 3. Observe / measure the area 4. List types of fence 5. Evaluate each type of fence 6. Determine the type of fence suitable for the garden 7. Design fence 8. Enlist materials required for the fence 9. Locate the fence in the design (map) 10. Prepare cost estimate 11. Follow precautions 12. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design fence of public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Need/Scope/Important • Objective • Types of fence: wall, stout barbed wire fence circulating the whole garden and others • Selection criteria as per situation • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Be careful while selecting appropriate type of fence strong enough to protect the garden.</p> | |

| Task 5: Design visitor-use-components for public garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the site 3. Assess overall situation and space 4. Observe and assess components 5. Prepare rough sketch 6. Locate followings components in the map: <ul style="list-style-type: none"> • Paths • Steps • Flower beds • Benches • Summer houses • Drinking fountains • W.C. / lavatory • Dust bins 7. Follow precautions 8. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design visitor-use-components for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Need/Scope/Important • Objective • Selection criteria as per situation • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Do not forget to locate the visitor-use-components in the design(map)</p> | |

| Task 6: Design lawns for public garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the garden site 3. Measure the area for lawn 4. Select ground cover(s)- living and inert 5. Identify parts of a lawn 6. Design the lawn 7. Enlist required materials 8. Locate the lawn in the map 9. Prepare cost estimate 10. Follow precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design lawns in public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Objective • Scope and importance • Lawn components • Greenery, ground cover, and smooth grass cover • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Take care to ensure the lawn designed meets all the objectives of a typical lawn inside a public garden.</p> | |

| Task 7: Design paths for public garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the garden site 3. Observe area and components 4. Determine location for paths 5. Determine dimensions of paths 6. Design paths 7. Enlist materials for path 8. Locate paths on the map 9. Prepare cost estimate 10. Follow precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design paths for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Objective • Scope and importance • Criteria for design • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Watch behavior of people in public gardens before designing paths to avoid short-cut ways.</p> | |

| Task 8: Design flower beds for public garden | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit garden site 3. Study the garden site 4. Assess the situation and area of the garden 5. Decide the types of flowers to be planted/bed to be prepared 6. Decide / select location (site) for flower beds 7. Determine/measure the dimension of flower beds 8. Make list of flower plants 9. Select flower plants 10. Design flower beds 11. Locate flowerbeds in the design map 12. Follow precautions 13. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design flower beds for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Scope and importance • Site selection criteria for flower beds • Dimension of flower beds • Types flower plants • Flower plant selection criteria • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Consider color combination</p> | |

| Task 9: Design location for trees / shrubs / climbers for public garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit garden site 3. Observe the site 4. Assess suitable locations for trees / shrubs / climbers 5. Decide locations for trees/shrubs/ climbers 6. Make list of trees/shrubs/climbers 7. Enlist required trees/shrubs/ climbers 8. Select trees / shrubs / climbers 9. Locate places for the trees / shrubs / climbers in the design map 10. Prepare cost estimation 11. Prepare proposal 12. Follow precautions 13. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design location for trees / shrubs / climbers for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/concept • Scope and Importance • Objectives • Characteristics of trees/climbers commonly used in public gardens • Cost and available places • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Take care while selecting types of trees / shrubs / climbers to maintain the beauty of the garden.</p> | |

| Task 10: Design hedges for public garden | | |
|--|---|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit garden site 3. Observe the condition, existing hedge, on the site 4. Assess the requirement 5. Decide the structure and requirement. 6. Decide location 7. Measure area 8. Identify hedge type 9. Select materials/plants as per location and condition 10. Calculate no of plants needed 11. Design hedges 12. Locate hedging plan in the design map 13. Prepare cost estimate and proposal 14. Follow precautions 15. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design hedges for public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition/Concept • Scope and importance • Objectives and uses of hedging in a garden • Types of hedge • Hedge materials and availability • Popular hedge plants and their characteristics (casuarinas, tecomas, and some types of crotons) • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Select a successful hedge plant that is evenly thick from top to bottom and from end to end</p> | |

| Task 11: Design water supply in public garden | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe site 3. Assess the requirements of water supply 4. Enlist water features of a public garden 5. Select water feature 6. Design the water feature 7. Locate the water feature in the design map 8. Design and locate in map a water supply system accessible in each unit / component / part 9. Prepare cost estimate and proposal 10. Follow precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design water supply in public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept/definition • Scope and importance • Common water features in a public garden (circulating water by means of pumps, waterfalls, water pool / ponds, sprinklers, fountain etc) • Cost and availability • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions: Use creativity while designing water features of the garden</p> | |

| Task 12: Prepare complete plan / design of a public garden | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe the garden site 3. Obtain all the component designs prepared 4. Review the prepared component designed 5. Revise if necessary 6. Compile the component designs prepared 7. Prepare complete plan / design of a public garden 8. Prepare slides for presentation 9. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Prepare complete plan / design of a public garden</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Scope and importance • Cost and availability • Components and features • Characteristics of each components • Principles,Features / components / units / parts of a typical public garden • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Pencil, eraser, graph /tracing papers, drawing table, instrument box</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Use creativity and design the garden addressing the future expansion / needs also. • Apply principle of designing | |

| Task 13: Construct public gardens | | |
|---|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Go to the site 3. Obtain the site map 4. Study the design 5. Obtain resources 6. Draw lines as per design 7. Locate different components as per design 8. Collect materials/tools as per components 9. Manage technicians/labor and experts as per need 10. Assign different task as per needs 11. Construct garden as per the design 12. Follow precautions 13. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Construct public gardens</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Definition • Scope and importance • Cost and availability • Components and features • Characteristics of each components • Principles of public garden designing • Features / components / units / parts of a typical public garden • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Related to garden construction works</p> | <p>Safety/precautions: Handle the tools, materials, and equipment safely</p> | |

| Task 14: Maintain public gardens | | |
|---|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare maintenance schedule of each garden unit 3. Observe site 4. Assess the condition 5. Prepare list of task 6. Identify tools /materials/equipment related to garden maintenance 7. Handle tools /materials/equipment related to garden maintenance 8. Maintain the garden units as per the schedule 9. Follow precautions 10. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Maintain public gardens</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Principles • Tools/materials/equipment • Maintenance schedule • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Related to garden maintenance</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Handle tools /materials/equipment related to garden maintenance safely and carefully | |

Module 6: Computer application in garden designing

Description:

This consists of skills and knowledge related to the application of computer in garden designing.

Objectives:

After its completion, the trainees will be able:

1. To apply computer skills in garden designing
2. To prepare different design using computer application

Tasks

1. Apply computer in garden designing
2. Design various types of gardens in computer

| Task 1: Apply computer in garden | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Observe / analyze garden site 3. Collect complete information for designing the garden 4. Determine type / style of garden to be designed 5. Operate computer 6. Prepare rough sketch of garden design plan 7. Get agreement from the owner 8. Design components of the garden 9. Prepare complete garden design 10. Follow precautions 11. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Apply computer in garden designing</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Scope and importance • Operating system • Designing software • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, Computer and other supplies</p> | <p>Safety/precautions: Handle computer safely</p> | |

| Task 2: Design various gardens in computer | | |
|---|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Visit the sites 3. Design Mugal garden 4. Design English garden 5. Design Japanese garden 6. Design Cottage garden 7. Design Korean garden 8. Design Chinese garden 9. Design Rock garden 10. Design Patio garden 11. Design Water garden 12. Design hanging garden 13. Design Sun VS shade garden 14. Design mixed garden 15. Design free style garden 16. Design landscape garden 17. Design residential landscape 18. Design public landscape 19. Design kitchen garden 20. Design flower gardens 21. Design tea garden 22. Design Vegetable garden 23. Design Herb garden 24. Design therapeutic garden 25. Design Fruit garden 26. Design Cactus garden 27. Design Orchid garden 28. Design Rose garden 29. Design Botanical garden 30. Design Zoological garden 31. Design recreational areas 32. Design indoor gardens 33. Design public gardens 34. Design industrial garden 35. Follow precautions 36. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Design various gardens in computer</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Concept • Principles of <ul style="list-style-type: none"> ▪ Mugal garden ▪ English garden ▪ Japanese garden ▪ Cottage garden ▪ Korean garden ▪ Chinese garden ▪ Rock garden ▪ Patio garden ▪ Water garden ▪ Hanging garden ▪ Sun VS shade garden ▪ Mixed garden ▪ Free style garden ▪ Landscape garden ▪ Residential landscape ▪ Public landscape ▪ Kitchen garden ▪ Flower gardens ▪ Tea garden ▪ Vegetable garden ▪ Herb garden ▪ Therapeutic garden ▪ Fruit garden ▪ Cactus garden ▪ Orchid garden ▪ Rose garden ▪ Parks ▪ Botanical garden ▪ Zoological garden ▪ Recreational areas ▪ Indoor gardens ▪ Public gardens ▪ Industrial garden • Precautions to be followed |
| <p>Tools /materials/equipment: Paper, pencil, eraser , other supplies, and computer</p> | <p>Safety/precautions: Give special emphasis on cliental needs and satisfaction</p> | |

Module 7: Management Activities

Description:

This consists of skills and knowledge related to management of different garden designing activities.

Objectives:

After its completion, the trainees will be able:

- To Manage garden designing activities
- To Market garden designing skills
- To communicate with others
- To develop professionalism

Sub modules:

1. Managing garden designing activities
2. Marketing
3. Communication
4. Professional development

Sub module 7.1: Managing garden designing activities

Description:

This consists of skills and knowledge related to garden designing activities.

Objectives:

After its completion, the trainees will be able:

- To manage garden designing activities

Task:

1. Manage garden designing activities

| Task 1: Manage garden designing activities | | |
|--|--|---|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Plan for garden designing activities 3. Establish contact office 4. Manage working space 5. Organize garden designing activities 6. Assess needs regularly 7. Prepare schedule 8. Update information 9. Prepare ToR for different technicians and workers 10. Assign task as per expertise 11. Coordinate with concerns 12. Manage financial activities 13. Maintain financial discipline 14. Direct garden designing activities 15. Control garden designing activities 16. Evaluate garden designing activities 17. Collect feedbacks 18. Take corrective actions 19. Follow precautions 20. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Manage garden designing activities</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Principles • Scope and importance • Planning • Organizing • Coordinating • Executing • Controlling • Evaluating • Feedback • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, scale, and other supplies</p> | <p>Safety/precautions: Take special emphasis on cliental satisfaction.</p> | |

Sub module: 7.2: Marketing

Description:

This consists of skills and knowledge related to marketing of garden designing skills.

Objectives:

After its completion, the trainees will be able:

- To market garden designing skills

Task:

1. Market garden designing skills

| Task 1: Market garden designing skills | | |
|--|--|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Prepare skill-marketing plan 3. Calculate cost 4. Price for garden designing services 5. Promote skill-sales 6. Prepare proposals 7. Present proposals 8. Sell skills of garden designing 9. Calculate profit / loss 10. Coordinate with concern 11. Visit concern 12. Follow precautions 13. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Market garden designing skills</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Principles • Scope and importance • Cost • Pricing • Promotion • Sales • Precautions to be followed • Records to be kept |
| <p>Tools /materials/equipment: Paper, pencil, and other supplies</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Always provide garden designing services to the satisfaction of the client • Always charge reasonable price | |

Sub module: 7.3: Communication

Description:

This consists of skills and knowledge related to communication for garden designing activities.

Objectives:

After its completion, the trainees will be able:

- To communicate with others.

Task:

1. Communicate with others

| Task 1: Communicate with others | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Write letters 3. Make telephone calls 4. Instruct juniors/helpers 5. Explore web site 6. Create mail address 7. Red email 8. Send mail 9. Inspect works of juniors/helpers 10. Exchange information with colleagues 11. Inform supervisor about the status of garden designing activities 12. Request for product improvement to the supervisor / manager 13. Manage workload with colleague 14. Write status report of the activities 15. Write invoice 16. Communicate with clients 17. Instruct clients about types of garden designs 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Communicate with others</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Principles • Scope and importance • Process • Types • Communication channels • Language • Web site • Email • Internet • Browser • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment:</p> <p>Telephone, paper, pen, email, enter net, web site, fax, Scanner, Camera</p> | <p>Safety/precautions:</p> <ul style="list-style-type: none"> • Take special care on providing clear and unambiguous message or information to others • Always overcome communication barriers | |

Sub module 7.4: Professional Development

Description:

This consists of skills and knowledge related to develop professionalism in the field of garden designing.

Objectives:

After its completion, the trainees will be able:

- To develop professionalism

Task:

1. Develop professionalism

| Task: 1: Develop professionalism | | |
|--|---|--|
| Steps | Terminal performance objective | Related technical knowledge |
| <ol style="list-style-type: none"> 1. Receive instruction 2. Share experience with supervisors 3. Learn from colleagues 4. Receive instruction from manager 5. Read related books 6. Attend training and workshops 7. Participate in flower exhibition 8. Attend meeting of the related association 9. Read professional journals 10. Browse web site 11. Operate office equipments 12. Prepare proposals 13. Present proposals 14. Prepare CV 15. Prepare Applications 16. Facilitate meeting/workshop 17. Manage events 18. Take precautions 19. Keep records | <p>Condition (Given): When supervisor assigned or request from customer</p> <p>Task (What): Develop professionalism</p> <p>Standard (How well): As per prescribe criteria.</p> | <ul style="list-style-type: none"> • Definition • Concept • Scope and importance • Types • Electronic information system • Precautions to be taken • Records to be kept |
| <p>Tools /materials/equipment: Telephone, paper, pen, and telephone</p> | <p>Safety/precautions: Take special care on updating the related technical skill</p> | |

Module 8: Entrepreneurship Development

| |
|--|
| <p>Course description</p> <p>This course is designed to impart the knowledge and skills necessary for micro enterprise or a business unit of self-employment startup. The entire course intends to introduce enterprise, finding suitable business ideas and developing business idea to formulate the business plan.</p> |
| <p>Course objectives</p> <p>After completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand concept of enterprise and self-employment 2. Explore suitable business idea matching to self 3. Learn to prepare business plan 4. Learn to keep preliminary business record |
| <p>Total: 40 hrs, Theory: 18 hrs, Practical: 22 hr</p> |
| <p>Task statements</p> <ol style="list-style-type: none"> 1. State the concept of business/enterprises 2. Grow entrepreneurial attitudes 3. Generate viable business ideas 4. Prepare business plan 5. Prepare basic business records |

| S. No. | Task statements | Related technical knowledge | Time (hrs) | | |
|--------|---|---|------------|----|------|
| | | | T | P | Tot. |
| 1. | State the concept of business/enterprises | <ul style="list-style-type: none"> • Introduction to business/enterprise • Classification of business/enterprises • Overview of MSMEs(Micro, Small and Medium Enterprises) in Nepal • Cost & Benefits of self-employment/salaried job | 4 | | 4 |
| 2. | Grow entrepreneurial attitudes | <ul style="list-style-type: none"> • Wheel of success • Risk taking attitude | 3 | | 3 |
| 3. | Generate viable business ideas | <ul style="list-style-type: none"> • Business idea generation • Evaluation of business ideas | 1 | 2 | 3 |
| 4. | Prepare business plan | <ul style="list-style-type: none"> • Concept of market and marketing • Description of product or service • Selection of business location • Estimation of market share | 9 | 18 | 27 |

| | | | | | |
|---------------|--------------------------------|---|-----------|-----------|-----------|
| | | <ul style="list-style-type: none"> • Promotional measures • Required fixed assets and cost • Required raw materials and costs • Operation process flow • Required human resource and cost • Office overhead and utilities • Working capital estimation and calculation of total finance required • Product costing and pricing • Cost benefit analysis (BEP, ROI) • Information collection method and guidelines • Individual business plan preparation and presentation | | | |
| 5. | Prepare basic business records | <ul style="list-style-type: none"> • Day book • Payable & receivable account | 1 | 2 | 3 |
| Total: | | | 18 | 22 | 40 |

Textbook:

क) प्रशिक्षकहरूका लागि निर्मित निर्देशिका तथा प्रशिक्षण सामग्री, प्राविधिक शिक्षा तथा व्यावसायिक तालीम परिषद्, २०६९

ख) प्रशिक्षार्थीहरूका लागि निर्मित पाठ्यसामग्री तथा कार्यपुस्तिका, प्राविधिक शिक्षा तथा व्यावसायिक तालीम परिषद् (अप्रकाशित), २०६९

Reference book:

Entrepreneur's Handbook, Technonet Asia, 1981

On the job training [OJT]

Overview of OJT

On-the-Job Training is an individual training approach designed to train the trainees to practice certain tasks while working in the job. It provides appropriate working environment for the teaching learning activities. During the OJT the training will be relevant as the trainees are being trained in a real work setting. The aim of the OJT is to provide the trainees the maximum experience & exposure of "The World of Work".

Objectives of OJT

After completion of OJT the trainees will be able to:

1. To practice/apply the skills/ knowledge developed by the trainees through institutional training in the real world of the related occupation
2. To practice the skills gained through institutional training that the trainees have not got enough opportunity to practice and apply them due to the institutional constraints/ limitation
3. To gain world of work experiences
4. To acquire skills and knowledge newly developed in the related field of occupation
5. To make trainees familiar with the future occupation/ job they are going to hold
6. To provide trainees with supporting skills and knowledge necessary for the related occupation
7. To make trainees familiar with the day to day administrative/managerial activities applicable in their related occupation.
8. To update the skills and knowledge as per changing contest.

OJT placement

The related training institute needs to perform the followings for OJT placement of the trainees.

1. Make list of the Employer agencies:
2. Select the employer agencies:
 - (a) Obtain the curriculum
 - (b) Match the skills specified in the curriculum with the occupational activities being conducted by the employer agencies
 - (c) Select the employer agencies for OJT which
 - Are well equipped and can provide maximum opportunity to practice /develop / apply the skills and knowledge included in the curriculum
 - Can provide recently developed knowledge / skills in the related occupation
 - Have the possibility to offer job for the trainees having satisfactory job performance after the completion of OJT.
 - Can provide adequate facilities to the trainees during OJT.
3. Contact the selected employer agencies for OJT
4. Make agreement with employer agencies regarding OJT.
5. Orient the employer regarding supervision & evaluation of the trainees on OJT.
6. Assign the trainees who have passed institutional training to the selected employer agencies
7. Orient the trainees for OJT (in terms of objectives, curriculum, activities in which they have to be involved, recording activities, supervision & evaluation.)
8. Send trainees with official letter to their assigned employer agencies for OJT.
9. Manage / provide salary (at least to cover the living cost) to the trainees.

10. Carryout initial supervision to guide and help socialize the trainees in their workplace during the start of OJT.
11. Carryout periodic supervision and evaluation of the trainees at least three times during the period of OJT.
12. Collect feedback as inputs for the revision of the curriculum.
13. Keep records.

Orientation to the trainees for OJT

The trainees who are placed on OJT are to be oriented by the related institute on the followings:

1. OJT curriculum and guidelines
2. OJT activities
3. OJT evaluation criteria

Suggestion to the trainees for OJT

1. Obtain curriculum
2. Receive orientation for OJT provided / delivered by the related training institute
3. Obtain official letter for joining OJT
4. Contact the assigned organization
5. Maintain attendance
6. Manage accommodation
7. Obtain job description
8. Visit / observe the related activities
9. Study the related workplace critically
10. Match the tasks specified in the curriculum with the actual tasks / activities being carried in the workplace.
11. Make the list of tasks that:
 - (a) You need to practice for confidence building
 - (b) You need to practice the skills that are not covered in the institutional Training
 - (c) You need to practice the skills that are not included in the curriculum but need to perform in the real world of the occupation for successful job performance.
 - (d) Recently developed skills through research applicable to your level of job after OJT.
 - (e) Be familiar with real work environment
12. Finalize the Task list consulting with:
 - (a) Your supervisor &
 - (b) Instructor
13. Practice / perform / develop as many relevant skills as possible related to your level of job.
14. Perform related administrative functions.
15. Perform / develop skills on the duties and tasks specified in the job description provided by the employer during OJT.
16. Get help from the senior (s) / supervisor (s) to perform the tasks \develop skills as maximum as possible.
17. Develop daily diary / log book
18. Fill the daily diary / log book
19. Get the daily diary / log book assigned by your supervisor regularly
20. Seek & follow suggestion from seniors
21. Show excellent job performance to influence your senior (s) / supervisor(s) so that they could recommend you to the employer to offer you the job after OJT.
22. Update professionalism.
23. Prepare report

Reading Materials

- Plant propagation, principles and practices, Hudson T. Hartmann, Dale E. Kester & Fred T. Davies, JR
- Fundamentals of horticulture, Dmond-Senn-Andrews-Halfacre
- Bagbani, part three, Ram Bahadur Shah & Birendra Bir Singh Basnet
- Hand book of Agriculture, ICAR, New Delhi
- Garden flowers, Dr. Vishnu Swarup, NBT, India
- Flowering Trees, M.S. Randhawa, NBT, India
- Roses, Amitabha Mukhopadhyay, NBT, India
- Principles of horticulture, C.R. Adams, K.m. Bamford & M.P. Early

List of Tools, Materials & equipment

- Computer
- Pins
- Pin- holders
- Tape
- Scissors
- Paper sheet
- Graph paper
- Tracing paper
- Pencil
- Eraser
- Scale
- Ruler
- Note book
- Pen
- Measuring tape
- clipboard
- Drawing sheet
- Drawing pen
- Poster color
- Drawing table
- Instrument box
- Spade
- Poly bags
- Sickles
- Showel
- Forke
- Jawel
- Secateurs
- Wheel barrow
- Vase
- GI wire
- Players
- Hammer
- Screw driver
- Rope
- Doko
- Thunse
- Scale
- Measuring tape
- Leveling instrument

Facilities

- Well equipped class rooms
- Well equipped computer lab
- Garden
- Flower shop
- Well equipped library
- Store
- Hostel (optional)
- Canteen
- Vehicle
- Water supply
- Electricity supply
- Collaboration with different types gardens for practical and observation

