

# GARDENER (MALI)

## COMPETENCY BASED CURRICULUM

(Duration: 01yr 03 months.)

## APPRENTICESHIP TRAINING SCHEME (ATS)

NSQF LEVEL- 4



India

कौशल भारत - कुशल भारत

SECTOR – AGRICULTURE AND ALLIED SERVICES



GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP  
DIRECTORATE GENERAL OF TRAINING



Directorate General of Training



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*Gardener (Mali)*

# GARDENER (MALI)

(Revised in 2018)

APPRENTICESHIP TRAINING SCHEME (ATS)



**Skill India**  
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Developed By

Ministry of Skill Development and Entrepreneurship  
Directorate General of Training  
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Special acknowledgement by DGT to the following expert members who have contributed immensely in this curriculum.

**Co-ordinator for the course: Shri .....**

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**1.1 Apprenticeship Training Scheme under Apprentice Act 1961**

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate(ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are four categories of apprentices namely; **trade apprentice, graduate, technician and technician (vocational) apprentices.**

Qualifications and period of apprenticeship training of **trade apprentices** vary from trade to trade. The apprenticeship training for trade apprentices consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

**1.2 Changes in Industrial Scenario**

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

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### **1.3 Reformation**

The Apprentices Act, 1961 has been amended and brought into effect from 22<sup>nd</sup> December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

- Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.
- Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.
- Scope has been extended also to non-engineering occupations.
- Establishments have been permitted to outsource basic training in an institute of their choice.
- The burden of compliance on industry has been reduced significantly.



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**2.1 GENERAL**

Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under aegis of National Council of Vocational Training (NCVT). Craftsman Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) are two pioneer programmes of NCVT for propagating vocational training.

Gardener (Mali) trade under ATS is one of the most popular courses delivered nationwide through different industries. The course is of one year and three month (01 Block of 15 months duration including basic training) duration. It mainly consists of Domain area and Core area. In the Domain area Trade Theory & Practical impart professional - skills and knowledge, while Core area - and Employability Skills imparts requisite core skills & knowledge and life skills. After passing out the training programme, the trainee is being awarded National Apprenticeship Certificate (NAC) by NCVT having worldwide recognition.

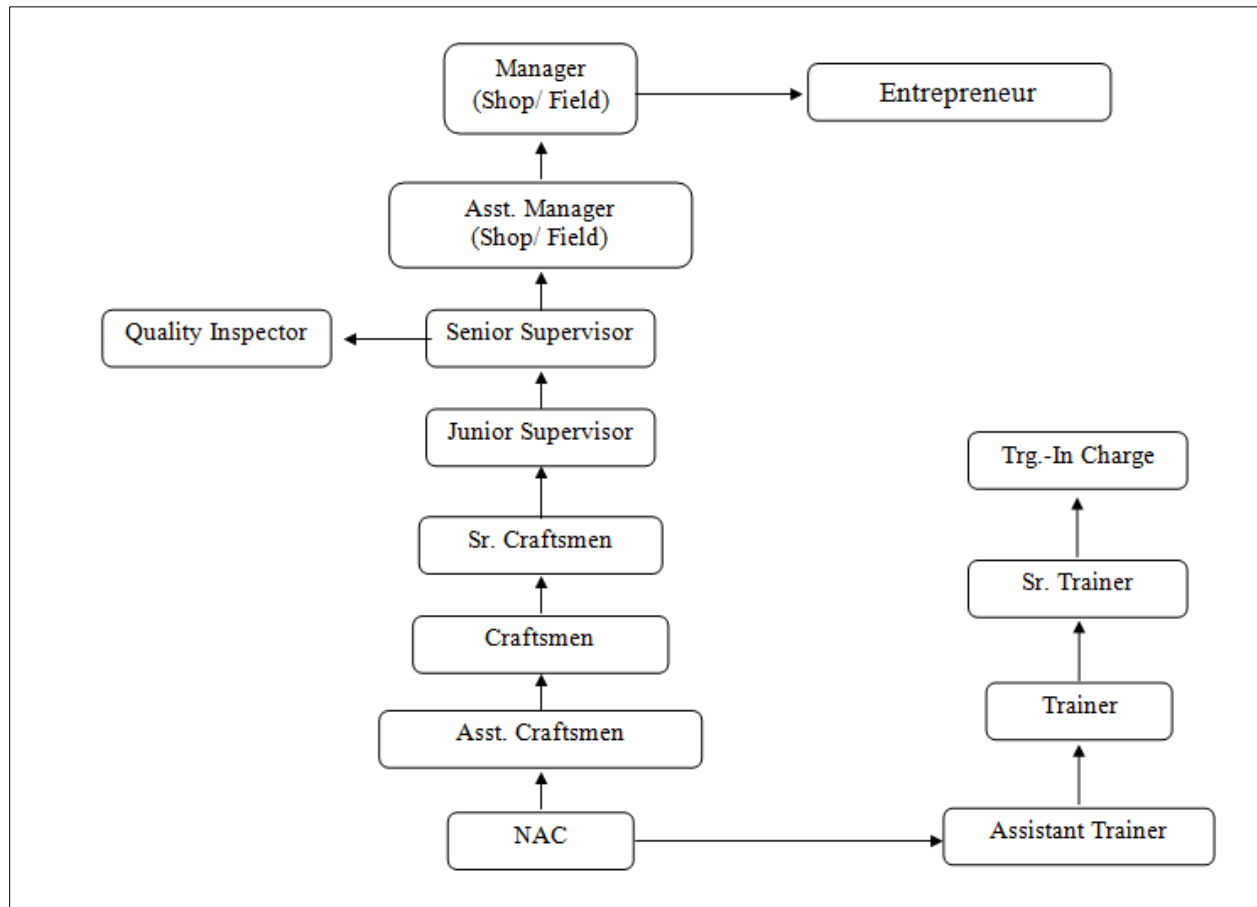
**Broadly candidates need to demonstrate that they are able to:**

- Read & interpret technical parameters/document, plan and organize work processes, identify necessary materials and tools;
- Perform task with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge, core skills & employability skills while performing jobs and solve problem during execution.
- Document the technical parameters related to the task undertaken.

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### 2.2 CAREER PROGRESSION PATHWAYS:

- Indicative pathways for vertical mobility.



### 2.3 COURSE STRUCTURE:

Table below depicts the distribution of training hours across various course elements during a period of one year (*Basic Training and On-Job Training*):-

**Total training duration details: -**

Time (in months)	1-3	4 -15
Basic Training	Block– I	-----
Practical Training (On - job training)	----	Block – I



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### A. Basic Training

For 02 yrs. Course (Non-Engg.):- **Total 03 months:** 03 months in 1<sup>st</sup>yr.only

For 01 yr. Course (Non-Engg.):- **Total 03 months:** 03 months in 1<sup>st</sup> yr.

Sl. No.	Course Element	Total Notional Training Hours (For 01 yr. Course)
1	Professional Skill (Trade Practical)	270
2	Professional Knowledge (Trade Theory)	120
3	Employability Skills	110
	<b>Total (including Internal Assessment)</b>	<b>500</b>

### B. On-Job Training:-

For 01 yr. Course (Non-Engg.) :- ( **Total 12 months**)

Notional Training Hours for On-Job Training: 2080 Hrs.

### C. Total training hours:-

Duration	Basic Training	On-Job Training	Total
For 02 yrs. Course (Non-Engg.)	500 hrs.	3640 hrs.	4140 hrs.
For 01 yr. Course (Non-Engg.)	500 hrs.	2080 hrs.	2580 hrs.

## 2.4 ASSESSMENT & CERTIFICATION:

The trainee will be tested for his skill, knowledge and attitude during the period of course and at the end of the training programme as notified by Govt of India from time to time. The Employability skills will be tested in first two semesters only.

a) The **Internal assessment** during the period of training will be done by **Formative assessment method** by testing for assessment criteria listed against learning outcomes. The training institute have to maintain individual *trainee portfolio* as detailed in assessment guideline. The marks of internal assessment will be as per the template (Annexure – II).

b) The final assessment will be in the form of summative assessment method. The All India Trade Test for awarding NAC will be conducted by NCVT on completion of course as per guideline of Govt of India. The pattern and marking structure is being notified by govt of India from time to time. **The learning outcome and assessment criteria will be basis for setting question papers for final assessment. The examiner during final examination will also check**

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individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

### **2.4.1 PASS REGULATION**

The minimum pass percent for Practical is 60% & minimum pass percent for Theory subjects 40%. The candidate pass in each subject conducted under all India trade test.

### **2.4.2 ASSESSMENT GUIDELINE**

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration should be given while assessing for team work, avoidance/reduction of scrap/wastage and disposal of scarp/wastage as per procedure, behavioral attitude, sensitivity to environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work

Evidences of internal assessments are to be preserved until forthcoming semester examination for audit and verification by examination body. The following marking pattern to be adopted while assessing:

<b>Performance Level</b>	<b>Evidence</b>
<b>(a) Weightage in the range of 60 -75% to be allotted during assessment</b>	
For performance in this grade, the candidate with occasional guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of an acceptable standard of craftsmanship.	<ul style="list-style-type: none"><li>• Demonstration of good skill in the use of hand tools, machine tools and workshop equipment</li><li>• Below 70% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards.</li></ul>

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	<ul style="list-style-type: none"><li>• A fairly good level of neatness and consistency in the finish</li><li>• Occasional support in completing the project/job.</li></ul>
<b>(b) Weightage in the range of above 75% - 90% to be allotted during assessment</b>	
For this grade, the candidate, with little guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of a reasonable standard of craftsmanship.	<ul style="list-style-type: none"><li>• Good skill levels in the use of hand tools, machine tools and workshop equipment</li><li>• 70-80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards.</li><li>• A good level of neatness and consistency in the finish</li><li>• Little support in completing the project/job</li></ul>
<b>(c) Weightage in the range of above 90% to be allotted during assessment</b>	
For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.	<ul style="list-style-type: none"><li>• High skill levels in the use of hand tools, machine tools and workshop equipment</li><li>• Above 80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards.</li><li>• A high level of neatness and consistency in the finish.</li><li>• Minimal or no support in completing the project.</li></ul>

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**Brief description of Job roles:**

**Planter** manages plantation on own account to grow plantation crops such as tea, coffee, rubber, etc. Arranges to procure seed according to type of crop such as tea, coffee, rubber, etc. Determines kinds of crop to be grown. Gets land cleared and prepared for growing crops by digging, ploughing, harrowing etc. Organizes and supervises various farm operations, sowing, manuring, weeding, spraying insecticide, and protection of crop from destruction by wild animals. Arranges harvesting of crop and supervises plucking, tapping and threshing of leaves, etc. Ensures proper maintenance and development of plantation estate. Supervises recruitment and welfare of labour employed. Maintains records relating to cost of production, sale and other accounts. May conduct research and organize demonstration. May arrange preservation of produce and partially process them prior to marketing. Is designated as Planter, Tea; Planter, Coffee; Planter, Cinchona; Planter, Cocoa; Planter, Rubber according to type of crop grown.

**Nurseryman;** Mali, Nursery manages nursery on own account, or on behalf of employer to grow trees, plants, flowers, shrubs, creepers, seeds, bulbs etc. in open air or green houses for sale to customers. Decides kind and number of plants to be grown and method of planting, cultivating and treatment based on soil, climatic conditions, irrigation facilities etc. Selects and purchases seeds, fertilizers, insecticide. Equipment and machinery and other items. Plans preparation of beds and method of planting, depending on type of plants to be grown. Prepares bed by various processes such as breaking soil, mixing fertilizers, etc. sows seeds, plants, seedlings, cuttings or propagates plants by grafting, budding and other methods and makes water channels. Watches growth of sapling, seedlings, grafts and plants. Hoes and prunes excess growth and off-shoots of plants, dusts and sprays pesticides and takes other measures to protect plants from pests, wild animals, etc. Observes development of plants. Develops methods of grafting and budding./ Collects and preserves seeds for sale. Hires labour if necessary and undertakes planting, weeding, pruning etc. as required. Supervises their work and trains them. Maintains buildings and equipment in good condition. Keeps records of cost and production statement. Sells seedling, seeds, bulbs etc. May specialize in landscape planting.

**Gardener, General;** Mali General grows flowers, trees, shrubs, seedlings, vegetables, etc. in public or private gardens. Prepares soil and sows seeds, plants, seedlings etc. Waters seed-beds and growing plants. Weeds and hoes garden and prunes hedges and bushes. Sprays and dusts pesticides and evolves other measures to protect plants from diseases and wild animals. Prepares soil and lays lawn. Waters mows and levels lawns. Prepares paths and ensures their proper up-keep. Collects and preserves seeds for sowing. Supervises labourers engaged for assistance. Keeps implements etc. in good working order. May maintain green house for

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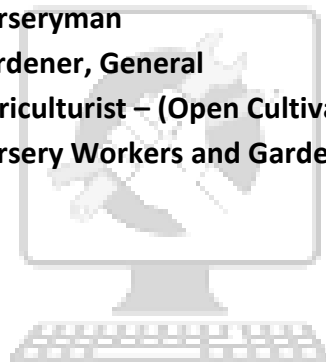
display. May cultivate vegetables and fruit trees. May specialize in ornamental gardening. May work in nursery for improving variety of plants from seeds, cuttings, grafting or budding and be designated as MALI, NURSERY. May sell plants, buy seeds, fertilizers, insecticides, etc. May pay wages to labourers employed.

**Floriculturist- (Open Cultivation)** performs the duties of a flower crop cultivator in the open field.

**Nursery Workers and Gardeners, other** include all other nursery workers and gardeners engaged in growing flowers, seeds, bulbs, vegetables etc., not elsewhere classified.

### **Reference NCO:**

- I. 6113.0100-Planter
- II. 6113.0200-Nurseryman
- III. 6113.0301-Gardener, General
- IV. 6113.0601-Floriculturist – (Open Cultivation)
- V. 6113.9900-Nursery Workers and Gardeners, Other



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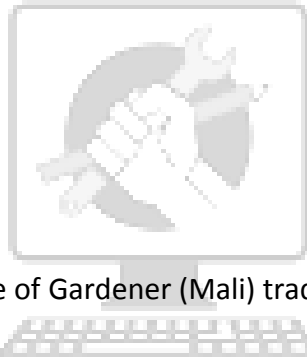
NSQF level for Gardener (Mali) trade under ATS: **Level 4**

As per notification issued by Govt. of India dated- 27.12.2013 on National Skill Qualification Framework total 10 (Ten) Levels are defined.

Each level of the NSQF is associated with a set of descriptors made up of five outcome statements, which describe in general terms, the minimum knowledge, skills and attributes that a learner needs to acquire in order to be certified for that level.

Each level of the NSQF is described by a statement of learning outcomes in five domains, known as level descriptors. These five domains are:

- a. Process
- b. Professional knowledge,
- c. Professional skill,
- d. Core skill and
- e. Responsibility.



The Broad Learning outcome of Gardener (Mali) trade under ATS mostly matches with the Level descriptor at Level- 4.

The NSQF level-4 descriptor is given below:

LEVEL	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
Level 4	Work in familiar, predictable, routine, situation of clear choice.	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	Language to communicate written or oral, with required clarity, skill to basic Arithmetic and algebraic principles, basic understanding of social political and natural environment.	Responsibility for own work and learning.

<b>Name of the Trade</b>	<b>Gardener (Mali)</b>
<b>NCO - 2015</b>	6113.0100-Planter 6113.0200-Nurseryman 6113.0301-Gardener, General 6113.0601-Floriculturist – (Open Cultivation) 6113.9900-Nursery Workers and Gardeners, Other
<b>NSQF Level</b>	Level – 4
<b>Duration of Apprenticeship Training</b> (Basic Training + On-Job Training)	3 months+ One year (01 Block of 15 months duration including basic training).
<b>Duration of Basic Training</b>	a) Block –I : 3 months <b>Total duration of Basic Training: 3 months</b>
<b>Duration of On-Job Training</b>	a) Block –I: 12 months <b>Total duration of Practical Training: 12 months</b>
<b>Entry Qualification</b>	Passed 8 <sup>th</sup> class examination
<b>Selection of Apprenticeship</b>	The apprentices will be selected as per Apprenticeship Act amended time to time.
<b>Instructors Qualification for Basic Training</b>	As per ITI instructors qualifications as amended time to time for the specific trade.
<b>Infrastructure for basic training</b>	As per related trade of ITI.
<b>Examination</b>	The internal examination/ assessment will be held on completion of each block. Final examination for all subjects will be held at the end of course and same will be conducted by NCVT.
<b>Rebate to Ex-ITI Trainees</b>	-----
<b>CTS trades eligible for Gardener (Mali) (Apprenticeship)</b>	-----

**Note:**

- Industry may impart training as per above time schedule for different block, however this is not fixed. The industry may adjust the duration of training considering the fact that all the components under the syllabus must be covered. However the flexibility should be given keeping in view that no safety aspects is compromised.
- For imparting Basic Training the industry to tie-up with ITIs having such specific trade and affiliated to NCVT.

**6.1 GENERIC LEARNING OUTCOME**

The following are minimum broad Common Occupational Skills/ Generic Learning Outcome after completion of the Gardener (Mali) course of 01 years duration under ATS.

**Block I:-**

1. Recognize & comply safe working practices, environment regulation and housekeeping.
2. Select and ascertain measuring instrument and measure dimension of components and record data.
3. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
4. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
5. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
6. Plan and organize the work related to the occupation.

**6.2 SPECIFIC LEARNING OUTCOME**

**Block – I**

1. Objectives of gardening, Branches of Horticulture, gardening and environment, qualities of successful gardener.
2. Familiarisation with various types of vegetable plants, seeds, various types of flowers, seasonal flowers, Fertiliser, pesticides, their uses.
3. Familiarisation with different tools and equipments used in gardening work.
4. Safety precaution to be observed in handling the Horticulture tools, equipments and materials.

**NOTE: Learning outcomes are reflection of total competencies of a trainee and assessment will be carried out as per assessment criteria.**



## 7. LEARNING OUTCOME WITH ASSESSMENT CRITERIA

GENERIC LEARNING OUTCOME	
LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Recognize & comply safe working practices, environment regulation and housekeeping.	1. 1. Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements.
	1. 2. Recognize and report all unsafe situations according to site policy.
	1. 3. Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.
	1. 4. Identify, handle and store / dispose off dangerous/unsalvageable goods and substances according to site policy and procedures following safety regulations and requirements.
	1. 5. Identify and observe site policies and procedures in regard to illness or accident.
	1. 6. Identify safety alarms accurately.
	1. 7. Report supervisor/ Competent of authority in the event of accident or sickness of any staff and record accident details correctly according to site accident/injury procedures.
	1. 8. Identify and observe site evacuation procedures according to site policy.
	1. 9. Identify Personal Protective Equipment (PPE) and use the same as per related working environment.
	1. 10. Identify basic first aid and use them under different circumstances.
	1. 11. Identify different fire extinguisher and use the same as per requirement.
	1. 12. Identify environmental pollution & contribute to avoidance of same.
	1. 13. Take opportunities to use energy and materials in an environmentally friendly manner
	1. 14. Avoid waste and dispose waste as per procedure
	1. 15. Recognize different components of 5S and apply the same in the working environment.
2. Select and ascertain measuring instrument and measure dimension of components and record data.	4.1 Select appropriate measuring instruments such as micrometers, verniercalipers, dial gauge, bevel protector and height gauge (as per tool list).
	4.2 Ascertain the functionality & correctness of the

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	instrument.
	4.3 Measure dimension of the components & record data to analyse the with given drawing/measurement.
3. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.	5.1 Explain the concept of productivity and quality tools and apply during execution of job.
	5.2 Understand the basic concept of labour welfare legislation and adhere to responsibilities and remain sensitive towards such laws.
	5.3 Knows benefits guaranteed under various acts
4. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.	6.1 Explain the concept of energy conservation, global warming, pollution and utilize the available recourses optimally & remain sensitive to avoid environment pollution.
	6.2 Dispose waste following standard procedure.
5. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	7. 1. Explain personnel finance and entrepreneurship.
	7. 2. Explain role of Various Schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to familiarizes with the Policies /Programmes & procedure & the available scheme.
	7. 3. Prepare Project report to become an entrepreneur for submission to financial institutions.
6. Plan and organize the work related to the occupation.	8. 1. Use documents, drawings and recognize hazards in the work site.
	8. 2. Plan workplace/ assembly location with due consideration to operational stipulation
	8. 3. Communicate effectively with others and plan project tasks
	8. 4. Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.
<b>SPECIFIC OUTCOME</b>	
<b><u>Block-I</u></b>	
<p><i>Assessment Criteria i.e. the standard of performance, for each specific learning outcome mentioned under <b>Block – I</b> (section: 10) must ensure that the trainee works in familiar, predictable, routine, situation of clear choice. Assessment criteria should broadly cover the aspect of <b>Planning</b> (Identify, ascertain, etc.); <b>Execution</b> apply factual knowledge of field of</i></p>	

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*knowledge, recall and demonstrate practical skill during performing the work in routine and repetitive in narrow range of application, using appropriate rule and tool, complying with basic arithmetic and algebraic principles and language to communicate in written or oral with required clarity; **Checking/ Testing** to ensure functionality during the assessment of each outcome. The assessments parameters must also ascertain that the candidate is responsible for his/her own work and learning.*



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**BASIC TRAINING (Block – I)****Duration: (03) Three Months**

Week No.	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
1	Familiarization of different types of soil and sites. Treatment of soil in different climate conditions. Familiarization and identification of various vegetables, seeds and plants, various types of flowers, seasonal flowers seeds, fertilizers pesticides, - their uses.	<b>General Principle :</b> Types of soils- Composition, Reaction, Soil Amendment, Pot Mixture, Repotting. Plant food, manures and fertilizer, organic and inorganic, Bio-fertilizer, liquid Nursery raising and their transplantation
2	Preparation of nursery and seed bed of different flowers and plants and after care. Practice in manuring, sowing, transplanting various flowers and plants. Familiarization of horticultural tools and their uses. Handling and maintenance of gardening equipment.	Seed bed preparation and method of plant propagation. Handling and Maintenance of gardening equipments.
3-4	Preparation of different flower beds and tree pits. Preparation of composite mixture and manuring practice in nursery and pots. Practice in different system of irrigation.	<b>Nursery Production :</b> Principle and practice involved in site selection, layout, soils, lifting and transplanting etc. safety precautions.
5-6	Culture of Annuals, Shrubs, chrysanthemum, Dalia, Rose, house plants flowers, Palms and Rens, Cacti. Practice in trimming, pruning and thinning Practice in budding, cutting, layering and grafting, etc. Development and maintenance of lawns.	<b>Plant Propagation :</b> Cultivation of annuals (Summer, Rainy and Winter seasons) seeding, budding, cutting and layering techniques of propagation and their method.
7-8	Identification of pests and diseases of flower plants and fruit tree.	<b>Flori-Culture :</b> Classification of flowers, their nursery

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	Preparation of doses of insecticides, weed cides, fungicides and pesticides. Spraying and dusting practice with suitable equipment.	production, study different types of herbs and shrubs for Hedge purpose.
9	Practice in preservation of seeds and fruits. Selection, grading, packing of flowers and fruits.	<b>Seed Production :</b> Method of seed production, sowing, after care, etc. harvesting, processing and storage.
10-12	Layout practice in landscape gardening and orchard. Practice in growing plants in green house conditions. Practice of flower arrangements. Cultivation of hedge and edge plants – selection of site and plants. Visit to nurseries and Horticulture. Storing, packing and transportation.	<b>Landscape Gardening :</b> Principles of landscape design for house Gardens, Public parks, preparation of complete landscape. a. Growing plants under Green house condition b. Flower and foliage arrangements c. Preparation of estimate d. Record keeping <b>Storing, Packing and Transportation.</b>
13	<b>Internal Assessment 03days</b>	

**Note:** - More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos of related industry operations may be shown to the trainees to give a feel of Industry and their future assignment.

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## 9.1 EMPLOYABILITY SKILLS

(DURATION: - 110 HRS.)

<b>Block – I</b> (Duration – 110 hrs.)	
<b>1. English Literacy</b> Duration : 20 Hrs. <span style="float: right;">Marks : 09</span>	
<b>Pronunciation</b>	Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)
<b>Functional Grammar</b>	Transformation of sentences, Voice change, Change of tense, Spellings.
<b>Reading</b>	Reading and understanding simple sentences about self, work and environment
<b>Writing</b>	Construction of simple sentences Writing simple English
<b>Speaking / Spoken English</b>	Speaking with preparation on self, on family, on friends/ classmates, on know, picture reading gain confidence through role-playing and discussions on current happening job description, asking about someone's job habitual actions. Cardinal (fundamental) numbers ordinal numbers. Taking messages, passing messages on and filling in message forms Greeting and introductions office hospitality, Resumes or curriculum vita essential parts, letters of application reference to previous communication.
<b>2. I.T. Literacy</b> Duration : 20 Hrs. <span style="float: right;">Marks : 09</span>	
<b>Basics of Computer</b>	Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer.
<b>Computer Operating System</b>	Basics of Operating System, WINDOWS, The user interface of Windows OS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc, Use of Common applications.
<b>Word processing and Worksheet</b>	Basic operating of Word Processing, Creating, opening and closing Documents, use of shortcuts, Creating and Editing of Text, Formatting the Text, Insertion & creation of Tables. Printing document. Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets.

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<b>Computer Networking and Internet</b>	Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks), Meaning of World Wide Web (WWW), Web Browser, Web Site, Web page and Search Engines. Accessing the Internet using Web Browser, Downloading and Printing Web Pages, Opening an email account and use of email. Social media sites and its implication. Information Security and antivirus tools, Do's and Don'ts in Information Security, Awareness of IT - ACT, types of cyber crimes.
<b>3. Communication Skills</b>	
Duration : 15 Hrs. <span style="float: right;">Marks : 07</span>	
<b>Introduction to Communication Skills</b>	Communication and its importance Principles of Effective communication Types of communication - verbal, non verbal, written, email, talking on phone. Non verbal communication -characteristics, components-Para-language Body language Barriers to communication and dealing with barriers. Handling nervousness/ discomfort.
<b>Listening Skills</b>	Listening-hearing and listening, effective listening, barriers to effective listening – guidelines for effective listening. Triple- A Listening - Attitude, Attention & Adjustment. Active Listening Skills.
<b>Motivational Training</b>	Characteristics Essential to Achieving Success. The Power of Positive Attitude. Self awareness Importance of Commitment Ethics and Values Ways to Motivate Oneself Personal Goal setting and Employability Planning.
<b>Facing Interviews</b>	Manners, Etiquettes, Dress code for an interview Do's & Don'ts for an interview.
<b>Behavioral Skills</b>	Problem Solving Confidence Building Attitude
<b>4. Entrepreneurship Skills</b>	
Duration: 15 Hrs. <span style="float: right;">Marks : 06</span>	
<b>Concept of Entrepreneurship</b>	Entrepreneur - Entrepreneurship - Enterprises:-Conceptual issue Entrepreneurship vs. management, Entrepreneurial motivation.

## Gardener (Mali)

	Performance & Record, Role & Function of entrepreneurs in relation to the enterprise & relation to the economy, Source of business ideas, Entrepreneurial opportunities, The process of setting up a business.
<b>Project Preparation &amp; Marketing analysis</b>	Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept & application of PLC, Sales & distribution Management. Different Between Small Scale & Large Scale Business, Market Survey, Method of marketing, Publicity and advertisement, Marketing Mix.
<b>Institutions Support</b>	Preparation of Project. Role of Various Schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to familiarizes with the Policies /Programmes& procedure & the available scheme.
<b>Investment Procurement</b>	Project formation, Feasibility, Legal formalities i.e., Shop Act, Estimation & Costing, Investment procedure - Loan procurement - Banking Processes.
<b>5. Productivity</b> Duration: 10 Hrs. <span style="float: right;">Marks : 05</span>	
<b>Benefits</b>	Personal / Workman - Incentive, Production linked Bonus, Improvement in living standard.
<b>Affecting Factors</b>	Skills, Working Aids, Automation, Environment, Motivation - How improves or slows down.
<b>Comparison with developed countries</b>	Comparative productivity in developed countries (viz. Germany, Japan and Australia) in selected industries e.g. Manufacturing, Steel, Mining, Construction etc. Living standards of those countries, wages.
<b>Personal Finance Management</b>	Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance.
<b>6. Occupational Safety, Health and Environment Education</b> Duration: 15 Hrs. <span style="float: right;">Marks : 06</span>	
<b>Safety &amp; Health</b>	Introduction to Occupational Safety and Health importance of safety and health at workplace.
<b>Occupational Hazards</b>	Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention.
<b>Accident &amp; safety</b>	Basic principles for protective equipment. Accident Prevention techniques - control of accidents and safety measures.



## Gardener (Mali)

<b>First Aid</b>	Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person.
<b>Basic Provisions</b>	Idea of basic provision legislation of India. safety, health, welfare under legislative of India.
<b>Ecosystem</b>	Introduction to Environment. Relationship between Society and Environment, Ecosystem and Factors causing imbalance.
<b>Pollution</b>	Pollution and pollutants including liquid, gaseous, solid and hazardous waste.
<b>Energy Conservation</b>	Conservation of Energy, re-use and recycle.
<b>Global warming</b>	Global warming, climate change and Ozone layer depletion.
<b>Ground Water</b>	Hydrological cycle, ground and surface water, Conservation and Harvesting of water.
<b>Environment</b>	Right attitude towards environment, Maintenance of in-house environment.
<b>7. Labour Welfare Legislation</b>	
Duration: 05 Hrs. <span style="float: right;">Marks : 03</span>	
<b>Welfare Acts</b>	Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund Act, The Workmen's compensation Act.
<b>8. Quality Tools</b>	
Duration: 10 Hrs. <span style="float: right;">Marks : 05</span>	
<b>Quality Consciousness</b>	Meaning of quality, Quality characteristic.
<b>Quality Circles</b>	Definition, Advantage of small group activity, objectives of quality Circle, Roles and function of Quality Circles in Organization, Operation of Quality circle. Approaches to starting Quality Circles, Steps for continuation Quality Circles.
<b>Quality Management System</b>	Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.
<b>House Keeping</b>	Purpose of House-keeping, Practice of good Housekeeping.
<b>Quality Tools</b>	Basic quality tools with a few examples.

## **10. DETAILS OF COMPETENCIES (ON-JOB TRAINING)**

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The **competencies/ specific outcomes** on completion of On-Job Training are detailed below: -

### **Block – I**

1. Objectives of gardening, Branches of Horticulture, gardening and environment, qualities of successful gardener.
2. Familiarisation with various types of vegetable plants, seeds, various types of flowers, seasonal flowers, Fertiliser, pesticides, their uses.
3. Familiarisation with different tools and equipments used in gardening work.
4. Safety precaution to be observed in handling the Horticulture tools, equipments and materials.

### **Note:**

1. Industry must ensure that above mentioned competencies are achieved by the trainees during their on job training.
2. In addition to above competencies/ outcomes industry may impart additional training relevant to the specific industry.

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INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL KNOWLEDGE

<b>GARDENER (MALI)</b>		
<b>LIST OF TOOLS AND EQUIPMENT for Basic Training (For 20 Apprentices)</b>		
<b>A: TRAINEES TOOL KIT ( For each additional unit trainees tool kit Sl. 1-18 is required additionally)</b>		
<b>Sl. No.</b>	<b>Name of the items</b>	<b>Quantity (indicative)</b>
1.	As per training need the tools & equipment may be procured.	
<b>B: TOOLS INSTRUMENTS AND GENERAL SHOP OUTFITS</b>		
2.	As per training need the tools & equipment may be procured.	
<b>C: Furniture Required</b>		
3.	As per training need the tools & equipment may be procured.	

**Note:** In case of basic training setup by the industry the tools, equipment and machinery available in the industry may also be used for imparting basic training.

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## Gardener (Mali)

TOOLS & EQUIPMENTS FOR EMPLOYABILITY SKILLS		
Sl. No.	Name of the items	Quantity
1.	Computer (PC) with latest configurations and Internet connection with standard operating system and standard word processor and worksheet software	10 Nos.
2.	UPS - 500VA	10 Nos.
3.	Scanner cum Printer	1 No.
4.	Computer Tables	10 Nos.
5.	Computer Chairs	20 Nos.
6.	LCD Projector	1 No.
7.	White Board 1200mm x 900mm	1 No.

*Note: - Above Tools & Equipments not required, if Computer LAB is available in the institute.*



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**FORMAT FOR INTERNAL ASSESSMENT**

<b>Name &amp; Address of the Assessor :</b>				<b>Year of Enrollment :</b>											
<b>Name &amp; Address of ITI (Govt./Pvt.) :</b>				<b>Date of Assessment :</b>											
<b>Name &amp; Address of the Industry :</b>				<b>Assessment location: Industry / ITI</b>											
<b>Trade Name :</b>			<b>Semester:</b>	<b>Duration of the Trade/course:</b>											
<b>Learning Outcome:</b>															
<b>Sl. No</b>	<b>Maximum Marks (Total 100 Marks)</b>			<b>15</b>	<b>5</b>	<b>10</b>	<b>5</b>	<b>10</b>	<b>10</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>15</b>	<b>Total internal assessment Marks</b>	<b>Result (Y/N)</b>
	<b>Candidate Name</b>	<b>Father's/Mother's Name</b>		<b>Safety consciousness</b>	<b>Workplace hygiene</b>	<b>Attendance/ Punctuality</b>	<b>Ability to follow Manuals/ Written instructions</b>	<b>Application of Knowledge</b>	<b>Skills to handle tools &amp; equipment</b>	<b>Economical use of materials</b>	<b>Speed in doing work</b>	<b>Quality in workmanship</b>	<b>VIVA</b>		
<b>1</b>															
<b>2</b>															