

NSQF QUALIFICATION FILE

Approved in 24th NSQC Dated 27th Feb, 2020

NSDA Code

2020/AGR/DGT/03620

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Directorate General of Training (DGT)
Government of India, Ministry of Skill Development and Entrepreneurship,
1st and 2nd Floor, CIRTES Building
Next to Pusa ITI, Pusa Campus
New Delhi – 110012.

Name and address of submitting body:

Directorate General of Training (DGT)
Government of India, Ministry of Skill Development and Entrepreneurship,
1st and 2nd Floor, CIRTES Building
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New Delhi – 110012.

Name and contact details of individual dealing with the submission

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Position in the organisation: Deputy Director General (C & P)

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List of documents submitted in support of the Qualifications File

1. Competency-based curriculum with following details:

Model Curriculum to be added which will include the following:

- a. Indicative list of tools/equipment to conduct the training: Enclosed with curriculum
 - b. Trainers qualification: Indicated in the curriculum
 - c. Lesson Plan: All DGT curricula are designed indicating specific practical to be carried out during training along with details of trade theory. Based on this the concerned instructor prepares the Lesson Plan and demonstration plan with support of IMPs developed by NIMI,DGT.
 - d. Distribution of training duration into theory/practical/OJT component: Indicated in the curriculum.
2. Curriculum for Core Skill (Employability Skill).

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• **SUMMARY**

1	Qualification Title	'FLORICULTURE & LANDSCAPING'
2	Qualification Code, if any	DGT/1081
3	NCO code and occupation	3435.0500 –Floral Designer 6113.0601 – Floriculturist- (Open Cultivation) 6113.0602–Floriculturist- (Protected Cultivation) 6130.0201 – Seed Grower/Quality Seed Grower
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	Prepare skilled Craftsmen to identify important commercial varieties of the flowering crops, prepare grounds and beds for planting specific flower crops, make layout of plots and gardens, plan for home gardens, landscape gardens, prepare and execute landscape plants, maintain gardens and lawns, accessories and containers for flower arrangements, for floral arrangement, preparation of floral ornaments bouquets, bottle gardens, terrarium etc. and protection for cultivation of flowers. It is long term qualification.
5	Body/bodies which will award the qualification	Directorate General of Training (DGT).
6	Body which will accredit providers to offer courses leading to the qualification	Directorate General of Training (DGT) accredits the Training providers (ITIs/ NSTIs/MSTIs/BTCs/BTPs / Industries / Establishments).
7	Whether accreditation/affiliation norms are already in place or not, if applicable (if yes, attach a copy)	Yes. The accreditation/ affiliation norms and any amendments made from time to time are available on DGT web portal.
8	Occupation(s) to which the qualification gives access	<ul style="list-style-type: none"> • 3435.0500 –Floral Designer • 6113.0601– Floriculturist- (Open Cultivation) • 6113.0602–Floriculturist-(Protected Cultivation) • 6130.0201–Seed Grower/Quality Seed Grower
9	Job description of the occupation	Floriculture & Landscaping individual will be able to apply knowledge about agrometeorology, soil management & its

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		conservation; performs simple and tongue layering, ground layering, air layering or goo tee; prepares ground and beds for planting specific flower crops; decides layout of plots and gardens, plans for home gardens, landscape gardens; prepares and executes landscape plants, perform maintenance of gardens and lawns will be responsible for floral arrangement; preparation of floral ornaments bouquets, bottle gardens, terrarium etc. and protection of cultivation of flowers.		
10	Licensing requirements	NOT REQUIRED		
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	NOT APPLICABLE		
12	Level of the qualification in the NSQF	Level 4		
13	Anticipated volume of training/learning required to complete the qualification	Sl. No.	Course Element	Notional Training Hours
		1	Professional Skill (Trade Practical)	1200
		2	Professional Knowledge (Trade Theory)	240
		3	Employability Skills	160
			Total	1600
14	Indicative list of training tools required to deliver this qualification	As per Annexure -I of curriculum.		
15	Entry requirements and/or recommendations and minimum age	Passed 10 th Class Examination. Minimum age 14years as on first day of academic session		
16	Progression from the qualification (Please show Professional and academic progression)	An Individual can proceed for		
		Professional <ul style="list-style-type: none"> • Craftsman • Senior Craftsman • Supervisor • Manager • Entrepreneur 	Technical / Academic <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> ATS CITS </div> <div style="text-align: center;"> Diploma/ Advance Diploma (Vocational) </div> </div>	

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17	Arrangements for the Recognition of Prior learning (RPL)	<ul style="list-style-type: none"> Yes (For more details refer “Guidelines for Private candidate” in DGT website MIS portal). 		
18	International comparability where known (research evidence to be provided)	-		
19	Date of planned review of the qualification.	5 Yrs. from the Date of Approval		
20	Formal structure of the qualification			
	Mandatory components			
	Title of component and identification code/NOSs/ Learning Outcomes	Estimated size (learning hours)		Level
		Skills	Knowledge	
TRADE SPECIFIC				
(i)	Identify metrological instruments and understand the diversity within the profession of Floriculture. Following safety precautions.	120	24	3
(ii)	Identify Plant morphology, different plant varieties and plant families.	30	6	3
(iii)	Identify different Soil types, Methods of soil sampling and collection, detection on physical and chemical properties of soil, Interpret soil test reports for proper rectification.	90	18	3
(iv)	Measure Soil fertility and apply soil fertility management for improvement of fertility of soil.	90	18	4
(v)	Apply integrated nutrient Management system (INMS) in the field.	60	12	4
(vi)	Identify and select different propagation methods, Handling of seed, bulbs, cut flowers, Nursery plants, pot plants.	150	30	4
(vii)	Identify and apply method of vegetative propagation and its management.	90	18	4
(viii)	Identify Commercial Flowers and their packaging.	210	42	4

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(ix)	Identify the diseases and apply the pesticide as per requirement.	120	24	4
(x)	Plan and execute Survey for landscaping and various types of indoor gardening.	210	42	4
(xi)	Carry out Protected cultivation of flower.	30	6	4
CORE SKILL				
EMPLOYABILITY SKILLS				
(i)	Apply safe working practices.	-	20	4
(ii)	Comply with environment regulation and housekeeping.	-	20	3
(iii)	Interpret & use formal and technical communication.	-	20	4
(iv)	Apply the concept in productivity & quality management in day to day work to improve productivity & quality.	-	20	4
(v)	List and interpret various acts of labour welfare legislation.	-	20	3
(vi)	Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.	-	20	3
(vii)	Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	-	20	3
(viii)	Utilize basic computer applications and internet to take benefit of IT developments in the industry.	-	20	4
Total		1600		-

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ASSESSMENT

21	<p>Body/Bodies which will carry out assessment: Controller of Examinations, DGT</p>
22	<p>DGT will carry out the RPL assessment following the below mentioned eligibility criteria for Trainee:</p> <p>Applicants aspiring to appear as Private Candidates in the AITT under CTS for award of NTC, have been categorized based on their educational background and experience. Subsequently 'Private Candidates' may be admitted under one of the following categories. Category wise 'eligibility criteria' for appearing as 'Private Candidate' in AITT under CTS has been listed below:</p> <p>Category I: Ex-trainees (successful pass-outs) of ITI</p> <p>A. Ex-trainees of ITI who already possess NTC in one of the trades under CTS, are eligible for applying as Private candidate for an allied trade, provided he/ she fulfils all the conditions regarding educational qualification etc. prescribed for that allied trade.</p> <p>B. In addition, the applicant should possess minimum of 1 year experience (as on date of submission of application) post the date of AITT result declaration in the desired allied trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p> <p>Category II: 'Ex-trainees (successful pass-outs) and current trainees under CoE scheme</p> <p>A. The applicant should have the minimum prescribed entry qualification and should fulfil eligibility criteria for the desired trade under CTS, in which he/she intends to appear for AITT as Private Candidate. CoE candidates must register as 'Private Candidate' under CTS in the relevant/mapped CTS trade only.</p> <p>B. There should be a minimum gap of 1 year between successful completions of CoE training i.e. from the date of result declaration to the date of submission of application for 'Private Candidate' certification.</p> <p>C. During this gap of 1 year, the candidate must have undergone Industry training or gained experience in desired trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p>

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	<p>Category III: SCVT Candidates (admitted till August 2018 session)</p> <p>A. No special provisions have been made for SCVT Trainees to enrol as 'Private Candidate'. Going forward, SCVT trainees have been granted equivalence vide G.S.R 186(E) dated 2nd March 2017 for undergoing apprenticeship training under the Apprentices Act 1961 to obtain 'NAC'.</p> <p>B. Only for SCVT trainees admitted till August 2018 batch, provision has been made for obtaining NTC by appearing in AITT under 'Private Candidate'. Such trainees will continue to be governed by old guidelines for 'Private Candidate'.</p> <p>Category IV: Other Candidates (candidate not falling in any of the above 3 categories, including SCVT trainees enrolled from admission session 2019 onwards)</p> <p>A. The applicant should have the minimum prescribed entry qualification and should fulfil eligibility criteria for the relevant trade under CTS, in which he/she desires to appear for AITT as Private Candidate.</p> <p>B. Applicant should be minimum 21 years of age on the date of submission of application. There is no upper age limit.</p> <p>C. The applicant should possess minimum of 3 years' experience (on the date of submission of application) in the relevant trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p> <p>For detail and updated information please refer to DGT web portal.</p>
23	<p>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</p> <p>(1) Assessment process:</p> <p>The assessment for the qualification is carried out by conducting formative assessments, and end of year examinations (Summative). The formative assessments in respect of each Learning Outcome for practical and related theory are conducted by the concerned instructors for evaluating the knowledge and skill acquired by trainees and the behavioural transformation of the trainees. This formative assessment is primarily carried out by collecting evidence of competence gained by the trainees by evaluating them at work based on assessment criteria, asking questions and initiating formative discussions to assess understanding and by evaluating records and reports. Summative assessment is carried out by All India Trade Test on Trade Theory, Trade practical and Employability Skills. The question papers for the theory Examinations contain objective type questions.</p>

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The marking pattern and distribution of marks for the qualification are as under:

Sl. No.	Type of assessment	Subject for the trade test	Marks
1	Summative Assessment	Practical	250
2		Trade Theory	100
5		Employability Skills	50
6	Formative assessment based on Learning Outcomes		200
TOTAL:			600

(2) Minimum pass marks:

The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%. There will be no Grace marks.

Testing and certifications for the course:

Controller of examinations, DGT carries out the assessment and issues National Trade Certificate (NTC) following the norms and guidelines issued by the Directorate from time to time.

Overall assessment strategy:

Assessment of the qualification evaluates trainees to show that they can integrate knowledge, skills and values for carrying out relevant tasks as per the defined learning outcomes and assessment criteria. The trainees may choose the preferred language for assessment. The underlying principle of assessment is fairness and transparency. While assessing the trainee, assessor is directed to assess as per the defined assessment criteria against the learning outcomes. The evidence of the competence acquired by the trainees can be obtained by conducting theory and practical examinations, observing the trainees at work, asking questions and

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	<p>initiating discussions to assess, understand and evaluate records and reports. The ultimate objective of the assessment is to assess the candidates as per the defined assessment criteria for the learning outcomes.</p> <p>Specific Arrangements for assessment:</p> <ul style="list-style-type: none"> • Assessment is outcome-based. • There are formative and summative assessments in Theory and Practical. • Assessment is carried out in Trade theory, Trade Practical and Employability Skills. • While Trade Theory and Trade Practical are used for assessing Trade-related jobs and Employability skills is used to test the communication, professional language, leadership, entrepreneurship and team-work abilities of the trainee. • In addition to demonstration of theory and practical knowledge, trainees get a chance to present total personality. <p>Quality assurance activities:</p> <p>Question papers are set by external paper setters/ software generated. Evaluation of Theory Examinations in Trade and Employability Skill is done by third-party agency.</p> <p>Trade Practical is examined by External Examiner.</p>
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24. Assessment evidences

Title of Component: Formative Assessment Breakup

(on half yearly average of the learning assessment covered)

Means of assessment		
Assessment will be evidence based comprising the following for each Learning Outcome:		
Serial No.	Terminal Competency	Maximum Weightage (%)
1	Safety consciousness	15
2	Workplace hygiene	5
3	Attendance/ Punctuality	10
4	Ability to follow Manuals/ Written instructions	5
5	Application of Knowledge	10
6	Skills to handle tools / equipment/ Instruments/ Devices	10
7	Economical use of materials	5
8	Working Strategy	10

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	9	Quality in workmanship/ Performance	15
	10	VIVA	15
		Total Maximum Weightage (%)	100

Pass/Fail

The minimum pass percentage is 60% marks for formative assessment.

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LEARNING OUTCOME WITH ASSESSMENT CRITERIA:

LEARNING OUTCOME(TRADE SPECIFIC)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Identify metrological instruments and understand the diversity within the profession of Floriculture following safety precautions.	Importance of different elements of weather and climate in agriculture.
	Knowledge on different agro-climatic regions of the country.
	Knowledge on crops grown relating to seasonal pattern, its field preparation methods, sowing and harvest.
	Identify different meteorological instruments and its use.
	Observe the different meteorological data and draw sketches.
	Knowledge on fundamentals of horticulture.
	Identification of plants based on botanical classification.
	List-out common names and botanical names
	Describe the commercial importance of horticulture plants.
2. Identify Plant morphology, different plant varieties and plant families.	Knowledge on plant morphology.
	Identify different plant varieties.
	Identify different plant families.
3. Identify different Soil types, Methods of soil sampling and collection, detection on physical and chemical properties of soil, Interpret soil test reports for proper rectification.	Identify different soil types
	Demonstrate soil sampling method, collection of soil, and procedure for sending to soil testing laboratory
	Knowledge on physical and chemical properties of soil
	Interpret soil test report
	Execute measurement of soil pH by litmus method and electronic pH meter.
	Analyze soil water holding capacity
	Demonstrate the use of soil testing kit.
	Knowledge on soil correction methods for acid soil, saline soil and alkaline soil.
	Demonstrate recycling methods of organic matter in soil
	Illustrate role of organic matter in soil.
	Demonstrate collection methods of Azolla and BGA.
Describe the use of Azolla and BGA	
4. Measure Soil fertility and apply soil fertility management for	Knowledge on soil fertility and soil fertility management.
	Knowledge on fertilizer and organic manures.
	List out different methods of composting

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improvement of fertility of soil.	Differentiate between FYM, sludge, poultry manure, vermin compost and NADEP compost.
	Execute the process of vermin compost and NADEP compost
	Evaluate the nutrient content of FYM, sludge, poultry manure, vermin compost and NADEP compost.
	Describe the role of different organic matter on improving soil quality.
5. Apply integrated nutrient Management system (INMS) in the field.	Knowledge on Integrated nutrient management system (INMS)
	Knowledge on green manure crops, its cultivation and package of practice.
	Identify seeds of different green manure crops.
	Identify different green manure crops.
	List out different green manure crops.
	Demonstrate and describe the methods of incorporation of green manure crops for improving soil fertility.
6. Identify and select different propagation methods, Handling of seed, bulbs, cut flowers, Nursery plants, pot plants.	Demonstrate different propagation methods
	Demonstrate handling of seeds, bulbs, cut flowers, nursery plants and pot plants.
	Knowledge on environmental factors, photo-periodism, dormancy and growth regulators.
	Illustrate protected cultivation
	Identify and describe different garden tools
	Identify different diseases, insect and weeds
	Knowledge on irrigation and its management
	Concept on different type and methods of irrigation
	Install different irrigation systems
	Knowledge on water management
	Knowledge on nursery management and seed production methods
	7. Identify and apply method of vegetative propagation and its management.
Knowledge on management of vegetative propagation	
Demonstrate different methods of bulb and corm production	
Knowledge on harvest and storage of bulb/ corm of different flowering plants.	
Identify different ornamental plants, flowering plants, indoor and bonsai plants.	
Knowledge on grading and packaging of seeds, seedlings, rooted cuttings pot plants, lawn grass, trees, shrubs, cacti, bonsai etc.	

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	Demonstrate pruning and shaping of plants
	Knowledge selection of suitable plant species for landscaping, pot plants, lawn grass and bonsai
	Illustrate package of practice of pot plants, lawn grasses, landscape plants and bonsai.
8. Identify Commercial Flowers and their packaging.	Identify commercial flowers.
	List out different commercial flowers.
	Illustrate package of practice of different commercial flowers.
	Knowledge on quality assessment, pulsing, conditioning, storage, packing of commercial flowers like lose flowers, long stem cut flowers, perennials, cut greens and annuals.
9. Identify the diseases and apply the pesticide as per requirement.	Identify pests and diseases.
	Prepare solution and application of sprays or dusts.
	Check quality parameters for cut flowers for domestic markets and for export.
10. Plan and execute Survey for landscaping and various types of indoor gardening.	Knowledge on survey and drafting methods for landscaping.
	Knowledge on making layouts and design for landscaping.
	Design and execute landscape garden.
	Knowledge on history, styles, scope and importance of gardening.
	Select plants for landscaping and gardening.
	Knowledge on maintenance of gardens and lawns.
	List out and describe different garden types.
	Demonstrate different styles of bottle garden and terrarium.
	Select different pot plants.
	Demonstrate the arrangement of different pot plants.
	Knowledge on maintenance of different pot plants.
	Demonstrate different floral arrangements.
	Demonstrate oriental, western and Japanese (Ikebana) floral arrangements.
	List out accessories and containers for floral arrangements.
	Prepare floral ornaments and bouquets.
	Knowledge on conditioning of cut flowers.
Demonstrate arrangement of cut flower and cut green.	
Knowledge on prolonging self life of vase flowers.	
11. Carry out Protected cultivation of flower.	Knowledge on protected cultivation of flowers.
	Identify poly house, shed net house and mulching.
	Construct ploy house, shed net house.
	Knowledge on mulching.

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LEARNING OUTCOME(CORE SKILL)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
EMPLOYBILITY SKILLS	
1. Apply safe working practices	Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements and according to site policy.
	Recognize and report all unsafe situations according to site policy.
	Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.
	Identify, handle and store / dispose of dangerous goods and substances according to site policy and procedures following safety regulations and requirements.
	Identify and observe site policies and procedures in regard to illness or accident.
	Identify safety alarms accurately.
	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.
	Identify and observe site evacuation procedures according to site policy.
	Identify Personal Protective Equipment (PPE) and use the same as per related working environment.
	Identify basic first aid and use them under different circumstances.
	Identify different fire extinguisher and use the same as per requirement.
2. Comply with environment regulation and housekeeping	Identify environmental pollution & contribute to the avoidance of instances of environmental pollution.
	Deploy environmental protection legislation & regulations
	Take opportunities to use energy and materials in an environmentally friendly manner.
	Avoid waste and dispose waste as per procedure
	Recognize different components of 5S and apply the same in the working environment.
3. Interpret & use formal and technical communication.	Obtain sources of information and recognize information.
	Use and draw up technical drawings and documents.
	Use documents and technical regulations and occupationally related provisions.

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	<p>Conduct appropriate and target oriented discussions with higher authority and within the team.</p> <p>Present facts and circumstances, possible solutions & use English special terminology.</p> <p>Resolve disputes within the team.</p> <p>Conduct written communication.</p>
4. Apply the concept in productivity & quality management in day to day work to improve productivity & quality.	<p>Explain the concept of productivity and apply during execution of job.</p> <p>Explain the concept of quality tools and apply during execution of job.</p>
5. List and interpret various acts of labour welfare legislation.	<p>Explain basic concept of labour welfare legislation, adhere to responsibilities and remain sensitive towards such laws.</p> <p>Knows benefits guaranteed under various acts.</p>
6. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.	<p>Explain the concept of energy conservation, global warming, pollution and utilize the available resources optimally & remain sensitive to avoid environment pollution.</p> <p>Explain standard procedure for disposal of waste.</p>
7. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	<p>Explain personnel finance and entrepreneurship.</p> <p>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 familiarize with the policies/ programmes, procedure & the available scheme.</p> <p>Prepare a report to become an entrepreneur for submission to financial institutions.</p>
8. Utilize basic computer applications and internet to take benefit of IT developments in the industry.	<p>Explain the basic hardware of personal computer.</p> <p>Use common application software viz., word, excel, power point etc., in day to day work.</p> <p>Awareness about useful internet websites, search relevant information pertaining to the assigned tasks.</p>

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Title/Name of qualification/component: FLORICULTURE & LANDSCAPING		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
Process	<p>Familiar, Predictable, Routine Situations of Clear Choice</p> <ul style="list-style-type: none"> Identify Plant morphology, different plant varieties and plant families. Measure Soil fertility and apply soil fertility management for improvement of fertility of soil. Apply integrated nutrient Management system (INMS) in the field. Identify and select different propagation methods, Handling of seed, bulbs, cut flowers, Nursery plants, pot plants. Identify Commercial Flowers and their packaging. Plan and execute Survey for landscaping and various types of indoor gardening. Identify the diseases and apply the pesticide as per requirement. 	<p>The learner is expected to know & understand the importance of different elements of weather and climate in agriculture. S/He is able to list out different methods of composting, execute the process of vermin compost and NADEP compost. The person identifies seeds of different green manure crops, incorporates green manure crops for improving soil fertility using various methods like applying integrated nutrient management system (INMS). The learner is able to perform protected cultivation, install different irrigation systems, identifies pests & diseases & prepares solution and application of sprays or dusts.</p> <p>The above tasks are performed by the learner in familiar environment. And her/his work is routine type with situation of clear choices & hence predictable.</p> <p>So, the NSQF level as per this descriptor will be</p>	4

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NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> Identify and apply method of vegetative propagation and its management Carry out Protected cultivation of flower. 	4.	
Professional knowledge	<p>Factual Knowledge of field of Knowledge or study</p> <ul style="list-style-type: none"> Importance of different elements of weather and climate in agriculture-rainfall, temperature, humidity, sunshine, wind speed and direction. Role of Green Manuring in crop production Green manuring Bio-fertilizer, Chemical Fertilizers, Depletion of Soil fertility Soil and climate, land preparation and planting, manuring, irrigation and other intercultural operations. Scheduling/forcing of flowering, use of 	<p>After the training the learner is able to understand the importance of weather and use of weather and climate information to enhance or expand agricultural crops and/or to increase crop production. S/He possess the factual knowledge of green manuring,its principles, methods and practices; also knows about different types of green manure crops like Dhaincha, Kalai, Cowpea, Sunhemp, Glyricidia & its cultivation process. The learner is able to schedule/force flowering by use of growth regulators.</p> <p>Hence NSQF Level 4 is justified for this descriptor.</p>	4

Title/Name of qualification/component: FLORICULTURE & LANDSCAPING			Level: 4
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
	growth regulators.		
Professional skill	<ul style="list-style-type: none"> • Identify metrological instruments and understand the diversity within the profession of Floriculture. • Identify Plant morphology, different plant varieties and plant families. • Measure Soil fertility and apply soil fertility management for improvement of fertility of soil. • Apply integrated nutrient Management system (INMS) in the field. • Identify and select different propagation methods, Handling of seed, bulbs, cut flowers, Nursery plants, pot plants. • Identify and apply method of vegetative propagation and its management. • Identify the diseases and apply the pesticide as per requirement. • Plan and execute Survey for landscaping and various types of indoor gardening. 	<p>The learner develops the ability to identify meteorological instruments and is able to install & record meteorological data. They are able to demonstrate recording of rainfall, temperature, humidity, wind direction etc. The individual possess the knowledge of physical form and external structure of plants with the help of which S/He is able to identify plant morphology- parts of roots, stems, flowers & seeds. They are able to propagate by cutting, budding, grafting. They are expected to perform seed treatment, soil treatment before sowing.</p> <p>Thus, the learner demonstrate practical skills which are routine & repetitive in narrow range of application using appropriate quality concepts, rules & tools.</p> <p>Hence NSQF Level 4 is justified.</p>	4

Title/Name of qualification/component: FLORICULTURE & LANDSCAPING			Level: 4
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
Core skill	<p>Language to communicate written or oral, with required clarity</p> <ul style="list-style-type: none"> • Interpret & use formal and technical communication. • Utilize computer applications and internet to take benefit of IT developments in the industry. <p>Basic understanding of social political and natural environment</p> <ul style="list-style-type: none"> • Explain energy conservation, global warming and pollution. • Comply with environment regulation and housekeeping. 	<p>The learner is able to read and write in simple English language and hence is able to communicate explain technical terms with required clarity. The learner can operate on computer as he possesses the basic knowledge of computer & its applications. Works as a team player and able to explain technical terms with required clarity. The learner performs the job complying environment regulation and housekeeping by applying safe working practices. Maintains energy conservation, prevents global warming & pollution by optimally using available resources in day to day work.</p> <p>Hence NSQF Level 4 is justified for this descriptor.</p>	4
Responsibility	<ul style="list-style-type: none"> • Identify different Soil types, Methods of soil sampling and collection, detection on physical and chemical properties of soil, Interpret soil test reports for proper rectification. • Identify and apply method of vegetative propagation and its management. • Plan and execute Survey for landscaping and various types of indoor gardening. • Identify Commercial Flowers and their 	<p>The learner is able to present facts , circumstances & possible solutions. S/He is expected to demonstrate the use of soil testing kit, analyze soil water holding capacity, interpret soil test reports, execute measurement of soil pH by litmus method and electronic pH meter.</p> <p>The learner is responsible for his own work & learning as he/she is capable for performing the above tasks on his own.</p>	4

Title/Name of qualification/component: FLORICULTURE & LANDSCAPING			Level: 4
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
	packaging. • Plan and execute Survey for landscaping and various types of indoor gardening. • Carry out Protected cultivation of flower.	Hence NSQF Level 4 is justified for this descriptor.	

NSQC Approved

Approved in 24th NSQC Dated 27th Feb, 2020**SECTION 3****EVIDENCE OF NEED**

26	<p>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</p> <table border="1" data-bbox="339 479 1390 1576"> <thead> <tr> <th data-bbox="339 479 628 622">Basis</th> <th data-bbox="628 479 1390 622">In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</th> </tr> </thead> <tbody> <tr> <td data-bbox="339 622 628 981">Need of the qualification</td> <td data-bbox="628 622 1390 981">Agriculture Sector has a significant presence of organized as well as unorganized skilled manpower requirement. This sector is poised to grow exponentially in the years to come and is highly labour intensive and there are many emerging trends in this sector. Hence the qualification has been designed keeping in view to cater to the ever-increasing demand of skilled manpower in consultation with stakeholders.</td> </tr> <tr> <td data-bbox="339 981 628 1384">Industry Relevance</td> <td data-bbox="628 981 1390 1384">The job role defined for the qualification is as per the National Classification of Occupations 2015 which is developed by Employment Directorate under the ministry of Labour and Employment in collaboration with different industry partners and as per ILO guidelines. Moreover, the training is imparted in ITIs/NSTIs/MSTIs/BTC/ BTPs/ Industries / Establishments etc. where such requirement is available. This justifies the qualification is very much relevant for industry.</td> </tr> <tr> <td data-bbox="339 1384 628 1503">Usage of the qualification</td> <td data-bbox="628 1384 1390 1503">The Proposed qualification will create skilled Craftsmen for various establishments in different Sectors.</td> </tr> <tr> <td data-bbox="339 1503 628 1576">Estimated uptake</td> <td data-bbox="628 1503 1390 1576">The present seating capacity is 286.</td> </tr> </tbody> </table>	Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)	Need of the qualification	Agriculture Sector has a significant presence of organized as well as unorganized skilled manpower requirement. This sector is poised to grow exponentially in the years to come and is highly labour intensive and there are many emerging trends in this sector. Hence the qualification has been designed keeping in view to cater to the ever-increasing demand of skilled manpower in consultation with stakeholders.	Industry Relevance	The job role defined for the qualification is as per the National Classification of Occupations 2015 which is developed by Employment Directorate under the ministry of Labour and Employment in collaboration with different industry partners and as per ILO guidelines. Moreover, the training is imparted in ITIs/NSTIs/MSTIs/BTC/ BTPs/ Industries / Establishments etc. where such requirement is available. This justifies the qualification is very much relevant for industry.	Usage of the qualification	The Proposed qualification will create skilled Craftsmen for various establishments in different Sectors.	Estimated uptake	The present seating capacity is 286.
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Estimated uptake	The present seating capacity is 286.										
27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences.</p> <p>The qualification, originally designed for Craftsman Training Scheme is in existence for many years and approved by DGT (Regulatory Body) under Ministry of Skill Development and Entrepreneurship, Govt. of India.</p>										
28	<p>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF?</p>										

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	<p>Give justification for presenting a duplicate qualification The qualification is originally designed and approved by DGT for the Craftsman Training Scheme and is in existence for many years. No such duplicate qualification of same duration and competencies exists.</p>
29	<p>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</p> <ul style="list-style-type: none"> • The research wing of CSTARI & DGT reviews and updates the qualification, in consultation with industries and other stakeholders, on a regular basis by conducting trade committee meetings. • DGT will monitor any duplicity by comparing existing qualifications with upcoming ones in the National Qualifications Register (NQR) and relevant sectors.

**SECTION 4
EVIDENCE OF PROGRESSION**

30 **What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector? Show the career map here to reflect the clear progression**

On completion of the training the trainee will have an opportunity to move in vertical/horizontal pathways to promote to higher designations. The learner can further undergo other specialised courses to excel in the relevant field.

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    graph LR
      A[Craftsman] --> B[Senior Craftsman]
      B --> C[Supervisor]
      C --> D[Manager]
      B --> E[Entrepreneur]
  
```

The diagram illustrates a career progression path. It starts with a box labeled 'Craftsman', followed by 'Senior Craftsman', 'Supervisor', and 'Manager' in a horizontal sequence, connected by right-pointing arrows. From the 'Senior Craftsman' box, a vertical arrow points down to a box labeled 'Entrepreneur'.