

NSDA Code 2020/SEC/DGT/03738

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
Next to Pusa ITI, Pusa Campus
New Delhi – 110012.

Name and contact details of individual dealing with the submission

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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 Skills (Employability Skills).

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e) SUMMARY

1	Qualification Title	'Fireman'
2	Qualification Code, if any	DGT/2008
3	NCO code and occupation	5411.0100 - Fire Fighter
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	<p>Prepare skilled Fireman to undertake the job roles of Fireman and will enable the trainee to fight fires as member of firefighting force using firefighting equipment to extinguish fire, rescue people and property from fire.</p> <p>It is a long term qualification.</p>
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)	<p>Yes.</p> <p>The accreditation/ affiliation norms and any amendments made from time to time are available on DGT web portal.</p>
8	Occupation(s) to which the qualification gives access	<ul style="list-style-type: none"> • 5411.0100 - Fire Fighter
9	Job description of the occupation	The individual visits scene of fire on motor vehicle equipped with firefighting material, water pumps etc. on receipt of fire information. Connects and mans hose to spray water or chemicals on fire, or uses portable fire extinguisher in places not accessible with hose. Demolishes parts of buildings or other structure as necessary, to clear passage and to prevent further spread of fire. Rescues trapped persons and administers artificial respiration to those overcome by heat or fire etc.
10	Licensing requirements	NOT REQUIRED
11	Statutory and Regulatory requirement of the relevant	NOT APPLICABLE

	sector (documentary evidence to be provided)			
12	Level of the qualification in the NSQF	Level 3		
13	Anticipated volume of training/learning required to complete the qualification	Sl. No.	Course Element	Notional Training Hours
		1	Professional Skill (Trade Practical)	580
		2	Professional Knowledge (Trade Theory)	140
		3	Employability Skills	80
			Total	800
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	<p>Passed class 10th Class Examination. Minimum age 14years as on first day of academic session.</p> <p>The minimum physical requirements:</p> <p>i. Height - 165 cm ii. Weight - 52 kg iii. Chest - Normal 81 cm - Expanded 85 cm.</p> <p>A registered MBBS doctor must certify that the candidate is medically fit to undertake the course.</p>		
16	Progression from the qualification (Please show Professional and academic progression)	An Individual can proceed for:		
		Professional <ul style="list-style-type: none"> • Fireman • Senior Fireman • Supervisor • Manager • Entrepreneur 	Technical / Academic <div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; border-top: 1px solid black;"></div> <div style="position: absolute; bottom: 0; left: 0; right: 0; border-bottom: 1px solid black;"></div> </div> ATS CITS <ul style="list-style-type: none"> Diploma/ Advance Diploma (Vocational) 	
17	Arrangements for the Recognition of Prior learning	<ul style="list-style-type: none"> • Yes (For more details refer “Guidelines for Private candidate” in DGT website) 		

	(RPL)	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 different types of fire, select & perform various Hose drill following safety precautions.	58	14	3
(ii)	Plan and perform fire fighting by using various types of fire extinguishers.	29	07	3
(iii)	Establish the fire suppression criteria, compare & create various methods of fire extinguishment.	29	07	3
(iv)	Identify water supply system, select and perform various Hydrant drill viz., 3 men, 4 men, etc.	58	14	3
(v)	Select & execute the functionality of ground ladder.	58	14	3
(vi)	Identify, select and make use of various small gears.	29	07	3
(vii)	Identify, Select and perform various pump drill.	29	07	3
(viii)	Select and ensure the use of Personal Protective Equipment (PPE).	29	07	3
(ix)	Classify various building construction structures and materials in relation to fire and life safety.	29	07	3

(x)	Identify the procedure for making mechanical foam and establish its effectiveness in extinguishing class B fire.	58	14	3
(xi)	Define risk evaluation and control procedures. Identify the direct/ indirect loss, mitigation measures, use of salvage sheets and salvage equipment.	58	14	3
(xii)	Execute technical rescue, use of rope, lines and various knots.	29	07	3
(xiii)	Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty.	58	14	3
(xiv)	Measure various capacities of water bodies & hydraulics in relation to water head, friction loss, velocity and water discharge	29	07	3
CORE SKILL				
EMPLOYABILITY SKILLS				
(i)	Apply safe working practices.	-	10	3
(ii)	Comply with environment regulation and housekeeping.		10	3
(iii)	Interpret & use formal and technical communication.		10	3
(iv)	Apply the concept in productivity & quality management in day to day work to improve productivity & quality.		10	3
(v)	List and interpret various acts of labour welfare legislation.		10	3
(vi)	Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.		10	3
(vii)	Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.		10	3
(viii)	Utilize basic computer applications and internet to take benefit of IT developments		10	3

	in the industry.		
	Total	800	

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SECTION 1
ASSESSMENT

21	<p>Body/Bodies which will carry out assessment: Controller of Examinations, DGT</p>
22	<p>How will RPL assessment be managed and who will carry it out? 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</p>

	<p>Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p> <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. (For detail and updated information please refer to DGT web portal.)</p>
<p>23</p>	<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: 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</p>

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.

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

Marking Pattern			
Sl. No.	Type of Assessment	Subject for the Trade Test	Marks
1	Summative Assessment	Practical	250
2		Trade Theory	100
3		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

	<p>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 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. 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

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Fireman

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
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.

LEARNING OUTCOME WITH ASSESSMENT CRITERIA:

LEARNING OUTCOME (TRADE SPECIFIC)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Identify different types of fire, select & perform various Hose drill following safety precautions.	Select the types of suction and delivery hose.
	Identify the Causes of hose decay & its prevention
	Perform Use of percolating & non-percolating hose
	Identify hose reel, causes of decay and its care & maintenance.
	Identify Importance of hose reel hose in first aid fire fighting in buildings and industries.
	Plan of work in compliance with standard tests of delivery hoses.
	Perform Standard test of Suction hose
	Identify the different groups of hose fittings and their uses.
	Measure of deep lift suction fittings.
	Type of Breaching and its uses.
	Identify the hose ramps, care and maintenance of hose fittings.
	Describe basic science and physics related to combustion
	Describe Basic property of matter, types of matter & effect of the heat on matter.
	Define Vapour density, Relative density effect of density on the behaviour of gases.
	Define Melting & boiling point
	Describe heat and its effect on matter, measurement Units of temperature and interchange.
	Identify Flammable liquids, gases, & vapours specific heat, latent heat.
	Define combustion, fire triangle, Fire tetra hadrons.
	Knowledge of various types of chemicals in the trade.
	Identify the type of chemicals and their hazard in the place.
Select the suitable chemicals on the workplace.	
Analyzed the effect of chemicals on the suitable jobs	
2. Plan and perform fire fighting by using various types of fire extinguishers.	Classify the types of fire and suitability of fire extinguisher on particular class of fire.
	Install the wall fitting and test it.
	Technique of fire extinction Smothering Cooling and Starvation.
	Observe the halon and its detrimental effect on Environment.
	Observe the safety/precaution during the operation of Extinguisher.

	Store pressure type and Cartridge type fire extinguishers
	Working principle of DCP, CO2, Mechanical Foam and Water type fire extinguishers.
3. Establish the fire suppression criteria, compare & create various methods of fire extinguishment.	<p>Ascertain the fire prevention measures and its importance in preventing fires</p> <p>Identify and ascertain the trade tools practice their uses with prevention jobs, care & maintenance</p> <p>Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.</p> <p>Identify trade equipment and their uses.</p> <p>Classify the types and method of operation of Fire Extinguishers.</p> <p>Operate of the fire extinguisher as following PASS method.</p> <p>Identify the suitability of fire extinguishers</p> <p>Carry out care & maintenance of fire extinguishers</p> <p>Carry out care & maintenance of all Fixed Fire Fighting Installations.</p> <p>Observe general safety precaution and occupational Health and hygiene.</p> <p>Identify the hazards other than fire in the work place.</p> <p>Know the ERP of the work place.</p> <p>Brief the reporting system within organization & work place</p> <p>Ensure emergency Exit routes</p> <p>Know the procedure of control, containment and confinement procedures.</p> <p>Classify the water based and non-water based fixed fire fighting systems.</p> <p>Classify the Types of water sprinkler systems, fusible link sprinkler, Quartzoid bulb sprinkler, drenchers etc.</p>
4. Identify water supply system, select and perform various Hydrant drill viz., 3 men, 4 men, etc.	<p>Identify Water main, Risers, Down comer</p> <p>Identify the functional application of Deluge valve system.</p> <p>Describe the fixed Foam Installations.</p> <p>Identify the importance of Foam pourer in tank protection</p> <p>Identify the main water discharging sources, Hydrants, Monitors, HVWS, MVWS, HVL R</p> <p>Describe the total flooding system I.e. CO2, FM-200.</p>
5. Select & execute the functionality of ground	<p>Describe the ladder used in fire services</p> <p>Brief the method of Pitching, ascending and descending the</p>

ladder.	ladder.
	Perform leg lock and arm hold
	Perform the standard test of the strings, rounds and extending line.
6. Identify, select and make use of various small gears.	Classification of small gears
	Select and use various cutting and breaking tools.
	Select special types of small gears
	Perform testing and care and maintenance of small gears.
7. Identify, Select and perform various pump drill.	Classify the common type of pumps.
	Methods of priming.
	Select and testing fault finding.
	Introduction to centrifugal pump.
	Observe care maintenance and testing criteria of pump.
8. Select and ensure the use of Personal Protective Equipment (PPE).	Assign the personal protection equipment, their proper selection and their uses.
	Prepare care & maintenance respiratory and non respiratory Personal protective equipment.
	Explain the head protection, ear protection, Face & eye protection, hand protection, Foot protection& Body protection.
	Explain various types of respiratory PPE, types of breathing apparatus, SCBA- function of all parts, uses and donning & doffing of SCBA.
9. Classify various building construction structures and materials in relation to life safety.	Classification of buildings as per NBC
	Execute building materials & their behaviour under fire conditions.
	Knowledge of various types of occupancies and fire load, fire fighting techniques.
	Classification and Zoning of Building according their Fire Load
	Create of importance of fire escapes with respect to their Positioning
	Nos. of fire escape, escape routes and travelling distance
	Pressurization and illumination in escape route
	Arrange the reference to NBC part IV fire construction and provisioning of passive fire fighting technique.
10. Identify the procedure for making mechanical	Classify the types of foam concentrates.
	Prepare & test foam making equipment-(mechanical foam).

foam and establish its effectiveness in extinguishing class B fire	Knowledge of high expansion and low expansion foam.
	Special uses of Medium & High expansion foam
	Plan & prepare storage of foam compound.
	Preservation of Foam Concentrations.
	Type & Application of dry chemical powder.
	Identify the compatibility of Dry Powder with foam
11. Define risk evaluation and control procedures. Identify the direct/ indirect loss, mitigation measures, use of salvage sheets and salvage equipment.	Know the application ratio of foam
	Calculate the requirement of total foam compound and water.
	Explain the direct and indirect loss due to fire incidents
	Execute the mitigation measures for indirect loss.
	Use of various Salvage sheets
	Ascertain the care; maintenance and testing of salvage equipment.
12. Execute technical rescue, use of rope, lines and various knots.	Knowledge of occupational health hazards & dangerous properties of chemicals.
	Analyzed the Dust Gases, Fumes, Mist, Vapours, Smoke and Aerosols.
	Concepts of threshold limit value.
	Classify Hazards.
13. Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty	Establish the risk assessment techniques
	Describe Ropes & Lines.
	Identify the knots and hitches.
	Ascertain the testing of different types of lines.
	Familiarization and practice with various rescue knots.
	Prevent deterioration and damage to ropes & lines.
	Perform rescue casualty from various situations, water rescue, rescue from height, rescue from rift, rescue from sewer, rescue from lift, rescue from well and animal rescue
	Identify the various tools and equipment use for rescue
14. Measure various capacities of water	Take the casualty in to the safe environment
	Check properly and render first aid accordingly
	Execute CPR if casualty found cardiac arrest
	Execute artificial respiration in case of breathing arrest
14. Measure various capacities of water	Apply Method of carrying stretcher with casualty.
	Select and apply the method of hydraulic test for fire

bodies and hydraulics in relation to water head, friction loss, velocity and water discharge.	extinguisher and SCBA set.
	Identify the Method of standard test of ladder and small gears
	Calculate capacity of tanks of given shapes and sizes.

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LEARNING OUTCOME (CORE SKILL)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
EMPLOYABILITY 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.
	Identify, handle and store / dispose off 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

	<p>same as per related working environment.</p> <p>Identify basic first aid and use them under different circumstances.</p>
2. Comply with environment regulation and housekeeping	<p>Identify environmental pollution & contribute to the avoidance of instances of environmental pollution.</p> <p>Deploy environmental protection legislation & regulations</p> <p>Take opportunities to use energy and materials in an environmentally friendly manner.</p> <p>Avoid waste and dispose waste as per procedure</p>
3. Interpret & use formal and technical communication.	<p>Obtain sources of information and recognize information.</p> <p>Use and draw up technical drawings and documents.</p> <p>Use documents and technical regulations and occupationally related provisions.</p> <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	<p>Explain personnel finance and entrepreneurship.</p>

<p>finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.</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>8. Utilize basic computer applications and internet to take benefit of IT developments in the industry.</p>	<p>Explain the basic hardware of personal computer. Use common application software viz., word etc., in day to day work. Awareness about useful internet websites, search relevant information pertaining to the assigned tasks.</p>

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SECTION 2
25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Fireman			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process	<p>Requires limited range of activities, routine & predictable</p> <ul style="list-style-type: none"> Identify, Select and perform various pump drill. Select and ensure the use of Personal Protective Equipment (PPE). Classify various building construction structures and materials in relation to fire and life safety. Identify the procedure for making mechanical foam and establish its effectiveness in extinguishing class B fire. 	<p>In all the learning outcomes for example ‘Select and ensure the use of Personal Protective Equipment (PPE)’ and ‘Identify the procedure for making mechanical foam and establish its effectiveness in extinguishing class B fire.’, the learner will be required to choose appropriate products, equipments, procedures as per the requirement of the job. The above tasks require limited range of activities which are routine type & predictable to achieve the tolerance level and accuracy demanded as per the job.</p> <p>Thus the NSQF level as per this descriptor will be 3.</p>	3
Professional knowledge	<p>Knowledge of Basic facts, process and principle applied in trade of employment</p> <ul style="list-style-type: none"> Hose and Hose Fittings: Type of suction & 	<p>The learner will need knowledge of basic facts, process and principle applied in Fireman trade of employment for example ‘Introduction of Fire Service Organization, Writing and importance of</p>	3

Title/Name of qualification/component: Fireman			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<p>Delivery Hoses, Material used in Construction.</p> <ul style="list-style-type: none"> • Introduction of Types of ladders, Extension Ladder, Hook Ladder, Use, Care and maintenance of ladders. • Breathing Apparatus set: Introduction of BA Set, Types of BA Sets in use, Components and function/ working principles of normal compressed air BA set and its station maintenance. 	<p>occurrence book.’ , ‘Fire Hazards in grasslands, Forest areas, rural areas and hay stacks.’ etc.</p> <p>The above knowledge possessed by the learner are the basic facts, process and principles applied in this trade of employment.</p> <p>Hence NSQF Level 3 is justified for this Descriptor.</p>	
Professional skill	<ul style="list-style-type: none"> • Select & execute the functionality of ground ladder. • Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty. • Define risk evaluation and control procedures. Identify the direct/ indirect loss, mitigation measures, use of salvage sheets and salvage equipment. • Execute technical rescue, use of rope, lines and various knots. 	<p>The learner is expected to perform first aid to casualty, estimate risk evaluation, follow control procedures, identify direct/ indirect loss, mitigation measures, execute technical rescue etc.</p> <p>In order to perform the above tasks the learner is expected to recall & demonstrate practical skills which are routine & repetitive in narrow range of application.</p> <p>Hence NSQF Level 3 is justified for this descriptor.</p>	3

Title/Name of qualification/component: Fireman			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Core skill	<p>Communication written and oral, with minimum required clarity</p> <ul style="list-style-type: none"> • Interpret & use formal and technical communication. <p>Basic Arithmetic and algebraic principles</p> <ul style="list-style-type: none"> • Explain science in the field of study including simple machine. <p>Understanding of social/political</p> <ul style="list-style-type: none"> • Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth. 	<p>The learner is able to communicate orally & in written using simple English language, has active listening skills. Works as a team player and able to explain technical terms with minimum required clarity. The learner is able to perform basic mathematical calculations like addition, subtraction, multiplication etc. He/she is able to perform 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 3 is justified for this descriptor.</p>	3
Responsibility	<ul style="list-style-type: none"> • Identify different types of fire, select & perform various Hose drill following safety precautions. • Plan and perform fire fighting by using various types of fire extinguishers. • Measure various capacities of water bodies & hydraulics in relation to water 	<p>The learner is expected to know the appropriate remedial action required for specific defect and thus is responsible for own work within defined limit. He/she is able to follow and perform work assigned to him/her and detect & resolve issues during execution. Thus the learner is responsible for own work. Also demonstrates possible</p>	3

Title/Name of qualification/component: Fireman			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	head, friction loss, velocity and water discharge.	solutions and agree tasks within the team. The learner is able to recognize & comply safe working practices under close supervision of the supervisor. Therefore NSQF Level 3 is justified for this descriptor.	

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="331 548 1380 1697"> <thead> <tr> <th data-bbox="331 548 619 689">Basis</th> <th data-bbox="619 548 1380 689">In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 689 619 1070">Need of the qualification</td> <td data-bbox="619 689 1380 1070">Private Security 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 labor 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="331 1070 619 1496">Industry Relevance</td> <td data-bbox="619 1070 1380 1496">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="331 1496 619 1624">Usage of the qualification</td> <td data-bbox="619 1496 1380 1624">The Proposed qualification will create skilled Fireman for various establishments in different Sectors.</td> </tr> <tr> <td data-bbox="331 1624 619 1697">Estimated uptake</td> <td data-bbox="619 1624 1380 1697">The present seating capacity is 182.</td> </tr> </tbody> </table>	Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)	Need of the qualification	Private Security 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 labor 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 Fireman for various establishments in different Sectors.	Estimated uptake	The present seating capacity is 182.
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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? Give justification for presenting a duplicate qualification</p> <p>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
    Fireman[Fireman] --> SeniorFireman[Senior Fireman]
    SeniorFireman --> Supervisor[Supervisor]
    Supervisor --> Manager[Manager]
    Fireman --> Entrepreneur[Entrepreneur]
    SeniorFireman --> Entrepreneur
    Supervisor --> Entrepreneur
    Manager --> Entrepreneur
  
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