

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Directorate General of Training (DGT)
Government of India, Ministry of Skill Development and Entrepreneurship,
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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,
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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 (Annexure 1)
2. Advertisements of different organisations for posts relevant to NTC in the trade

Model Curriculum to be added which will include the following:

- **Indicative list of tools/equipment to conduct the training:** Enclosed with curricula
- **Trainers qualification:** Indicated in the curriculum
- **Lesson Plan:** All NCVT 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 with support of Reference Books and IMPs developed by DGT.
- **Distribution of training duration into theory/practical/OJT component:** Indicated in the curriculum.

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)	National Council for Vocational Training (NCVT) (long term qualification)		
5	Body/bodies which will award the qualification	National Council for Vocational Training (NCVT) affiliates the ITIs as per DGT guidelines issued from time to time.		
6	Body which will accredit providers to offer courses leading to the qualification	National Council for Vocational Training (NCVT)		
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy)	Yes. The accreditation/ affiliation norms for all training providers are as per DGT guidelines issued from time to time with approval of NCVT.		
8	Occupation(s) to which the qualification gives access	Fireman has a wide scope of Employability ranging from self-employment, contractual employment to Industrial jobs. On successful completion of this course, the candidates shall be gainfully employed in the industries for following occupations: <ul style="list-style-type: none"> • Fire Fighter 		
9	Job description of the occupation	Indicated in the curriculum		
10	Licensing requirements	N/A		
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	N/A		
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)	660
		2.	Professional Knowledge (Trade Theory)	132
		3.	Employability Skills	55
		4.	Library & Extra curricula activity	33

		5.	Project Work	80
		6.	Revision & Examination	80
			Total	1040
14	Indicative list of training tools required to deliver this qualification	As per Annexure enclosed in the curriculum		
15	Entry requirements and/or recommendations and minimum age	a. Passed class 10 th Class Exam. Under 10+2 system of education Or its equivalent with Mathematics and Sciences subject. b. The minimum physical requirements are i. Height - 165 cm ii. Weight - 52 kg iii. Chest - Normal 81 cm - Expanded 85 cm iv. A registered MBBS doctor must certify that the candidate is medically fit to undertake the course.		
16	Progression from the qualification (Please show Professional and academic progression)	<ul style="list-style-type: none"> • Can join as Fire Fighter in Industry.. • Can join Apprenticeship programme in different types of industries leading to National Apprenticeship certificate (NAC). • Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs. 		
17	Arrangements for the Recognition of Prior learning (RPL)	1. At present the students who have passed 10th class with minimum 3 years' experience in relevant field can appear for NCVT theory and practical semester examination directly. 2. The students who have passed SCVT examination in 'Fireman' trade can also appear for the NCVT Examination in the relevant semester and Trade directly.		
18	International comparability where known (research evidence to be provided)	1. Existence of any official document suggesting the comparability of the qualification with the qualifications in other countries is not known. 2. However, ITI passed out trainees are getting employment in many Gulf countries, European countries, Australia, New Zealand, Singapore etc.		
19	Date of planned review of the qualification.	July 2023		
20	Formal structure of the qualification			
	Mandatory components			
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level	

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Fireman

Semester – I			
(i)	Recognize & comply safe working practices, environment regulation and housekeeping.	40	3
(ii)	Identify different types of fire, select & perform various Hose drill.	80	3
(iii)	Plan and perform fire fighting by using various types of fire extinguishers.	40	3
(iv)	Establish the fire suppression criteria, compare and create various methods of fire extinguishment.	40	3
(v)	Identify water supply system, select and perform various Hydrant drill viz., 3 men, 4 men, etc.	80	3
(vi)	Select & execute the functionality of ground ladder.	80	3
(vii)	Identify, select and make use of various small gears.	40	3
(viii)	Identify, Select and perform various pump drill.	40	3
(ix)	Select and execute the use of Personal Protective Equipment (PPE).	40	3
(x)	Classify various building construction structures and materials in relation to fire and life safety.	40	3
(xi)	Identify the procedure for making mechanical foam and establish its effectiveness in extinguishing class B fire.	80	3
(xii)	Define risk evaluation and control procedures. Identify the direct/indirect loss, mitigation measures, use of salvage sheets and salvage equipment.	50	3
(xiii)	Execute technical rescue, use of rope, lines and various knots.	40	3
(xiv)	Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty.	120	3
(xv)	Define risk evaluation and control procedures. Identify the direct/indirect loss, mitigation measures,	30	3

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Fireman

	use of salvage sheets and salvage equipment.		
(xvi)	Measure various capacities of water bodies & hydraulics in relation to water head, friction loss, velocity and water discharge.	40	3
Revision, Project work and Examination		160	
	Sub Total (A)	1040	
	Optional components	N/A (All components are compulsory)	
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	Sub Total (B)		
<u>Total (A+B)</u>		<u>1040</u>	

**SECTION 1
ASSESSMENT**

21	<p>Body/Bodies which will carry out assessment: National Council for Vocational Training (NCVT)</p>																				
22	<p>How will RPL assessment be managed and who will carry it out?</p> <ol style="list-style-type: none"> 1. At present the students who have passed 10th class with minimum 3 years' experience can appear for NCVT theory and practical semester examination directly. 2. The students who have passed SCVT examination in 'Fireman' trade can also appear for the NCVT Examination in the relevant semester and Trade directly. NCVT will carry out the assessment and State Directorates advertise in newspapers for informing the prospective candidates. 																				
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 semester-based qualification is carried out by conducting formative assessments, and end-of-semester examinations. The internal assessments for theory subjects and practical are conducted by the concerned instructors for evaluating the knowledge and skill acquired by trainees and the behavioural transformation of the trainees. This internal 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, and sessional marks are awarded to them. Theory and practical examinations are conducted in Trade theory and Employability Skills. The question papers for the theory Examinations contain objective type questions. Trade practical examinations are conducted by the respective State Governments. However, the question papers for the Trade practical are prepared by NCVT.</p> <p>The marking pattern and distribution of marks for the qualification are as under:</p> <table border="1" data-bbox="312 1496 1401 2004"> <thead> <tr> <th colspan="3">Marking Pattern</th> </tr> <tr> <th>Sl. No.</th> <th>Subject for the trade test</th> <th>Maximum marks for the each subject</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>Practical</td> <td>100</td> </tr> <tr> <td>b)</td> <td>Trade Theory</td> <td rowspan="2">80 Objective type Written test of 80 marks (Trade Theory 30 marks & Employability Skills 50 marks)</td> </tr> <tr> <td>c)</td> <td>Employability Skills</td> </tr> <tr> <td>d)</td> <td>Internal assessment</td> <td>20</td> </tr> <tr> <td colspan="2">TOTAL:</td> <td>200</td> </tr> </tbody> </table>	Marking Pattern			Sl. No.	Subject for the trade test	Maximum marks for the each subject	a)	Practical	100	b)	Trade Theory	80 Objective type Written test of 80 marks (Trade Theory 30 marks & Employability Skills 50 marks)	c)	Employability Skills	d)	Internal assessment	20	TOTAL:		200
Marking Pattern																					
Sl. No.	Subject for the trade test	Maximum marks for the each subject																			
a)	Practical	100																			
b)	Trade Theory	80 Objective type Written test of 80 marks (Trade Theory 30 marks & Employability Skills 50 marks)																			
c)	Employability Skills																				
d)	Internal assessment	20																			
TOTAL:		200																			

(2) Minimum pass marks:

The minimum pass percentage for practical is 60% & minimum pass percentage of theory subjects is 40%. For the purposes of determining the overall result, 50% weightage is applied to the result of each semester examination.

(3) Testing and certifications for the course:

- OMR sheet based question paper.
- A panel of expert paper setters, who are graduates in the concerned field with minimum 5-7 years experience, is prepared for setting question papers for the Trade. The panel is vetted by the Member Secretary, NCVT.
- Paper setters are appointed from the panel after the approval of the competent authority for setting the question paper.
- The question papers are then moderated by the Board of Moderation to see if the paper is set as per the requirement and syllabus.
- The manuscripts of the moderated question papers are sent to Government Printing Presses for printing.
- Printed question papers, packed in sealed covers, are despatched to Banks/Police Stations for keeping in safe custody.
- The question papers are handed over to the Chairman/Principal of the Testing Centre two hours before the commencement of the Examination.
- An Examination Board consisting of representatives of industry/Employer/State Government are set up to supervise and monitor the conduct of Examinations at every Centre.
- Theory and practical Examinations are carried out with invigilators/examiners with the overall supervision of the Examination Board.
- Examiners called for evaluation of practical should have minimum technical qualification of a Diploma in the respective engineering field. However, when diploma holders not available, the qualification is suitably relaxed.
- Examiners for practical Examinations are appointed preferably from Polytechnics/ Engineering colleges/ Industry of repute/ Government Departments or from amongst retired qualified personnel possessing requisite qualifications and sufficient experience in the trade/discipline.
- Each State Directorate prepares a panel of Examiners according to the norms as mentioned above and the Examiners are appointed from the panel.
- Flying squads from State Governments as well as the Central Government are constituted to check malpractices during the conduct of Examinations.
- OMR based answer sheets are evaluated by the third party evaluator only. Third party evaluator is selected for three years by open bidding process.
- Evaluation of every practical examination is carried out by the concerned examiner (from industry/ polytechnics) with the overall supervision of the Examination Board in a free and fair manner as per the assessment criteria.
- Till 2014, the marks were compiled by the State Governments as per NCVT guidelines and the results were declared by the State Governments. At present, the marks are compiled by NCVT on its portal www.ncvtmis.gov.in and the results are declared by the State Governments.
- The successful trainees are awarded National Trade Certificates.

Overall assessment strategy:

Assessment of the qualification evaluates trainees to show that they can integrate

	<p>knowledge, skills and values for carrying out relevant tasks as per the defined assessable 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 assessable 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 formative discussions to assess understanding and evaluating records and reports. The ultimate objective of the assessment is to assess the candidates as per the defined assessment criteria for the assessable/ 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 and language skills 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> <ul style="list-style-type: none"> • Question papers are set by external paper setters • Evaluation of Theory Examinations is done by third-part agency. Third party evaluator is selected for three years by open bidding process. • Trade Practical is examined by External Examiner (as explained above).
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Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

24. ASSESSMENT EVIDENCE

Means of assessment 1

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

Means of assessment 2

Add boxes as required.

Pass/Fail

The minimum pass percentage is 40% for each Theory Examination and 25% for each part /section of the Examination separately, and 60% marks for each Trade practical Examination.

Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.

Title of Component: Fireman

GENERIC LEARNING/ ASSESSABLE OUTCOME:

GENERIC LEARNING/ ASSESSABLE OUTCOME	
LEARNING / ASSESSABLE OUTCOME	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 and according to policy.
	1.2 Recognize and report all unsafe situations according to policy.
	1.3 Identify and take necessary precautions on fire and safety hazards and report according to work policy and procedures.

	1.4 Identify, handle and store / dispose-off dangerous goods and substances according to policy and procedures following safety regulations and requirements.
	1.5 Identify and observe policies and procedures in regard to illness or accident.
	1.6 Identify safety alarms accurately.
	1.7 Report supervisor/ Competent authority in the event of accident or sickness of any staff and record accident details correctly according to accident/injury procedures.
	1.8 Identify and observe 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.
2. Work in a team, understand and practice soft skills, technical English to communicate	4.1 Obtain sources of information and recognize information.
	4.2 Use documents, regulations and occupationally related provisions.
	4.3 Conduct appropriate and target oriented discussions with higher authority and within the team.
	4.4 Present facts and circumstances, possible solutions & use English and French terminology.
	4.5 Resolve disputes within the team.
	4.6 Conduct written communication.
3. Explain Personal Finance, Entrepreneurship and manage/organise related tasks in day to day work personal and societal growth	3.1 Explain personnel finance and entrepreneurship.
	3.2 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 familiarize with the Policies/Programmes & procedure & the available scheme.
	3.3 Prepare Project report to become an entrepreneur for submission to financial institutions.
4. Exhibit the written & Communication skill and utilize basic computer applications and internet to take benefit of IT developments in the industry.	4.1 Ascertain the maintenance of various documents
	4.2 Explain the call receiving method
	4.3 Brief documentation of Occurrence book, Log book, Attendance register, Leave register, hose cards etc.
	4.4 Explain the method of fire call reporting
	4.5 Internal examination to test knowledge on basic computer
	4.6 Working, basic operating system and uses internet services.
	4.7 Their applications will be assessed during execution of assessable outcome.

5. Read, Write and understand English and at least in one vernacular language.	5.1 Read and understand simple sentences about self, work and environment.
	5.2 Construct simple sentence in English.
	5.3 Greet over Phone and Take messages.

SPECIFIC LEARNING/ ASSESSABLE OUTCOME:

SPECIFIC LEARNING/ ASSESSABLE OUTCOME	
LEARNING/ ASSESSABLE OUTCOME	ASSESSMENT CRITERIA
6. Identify different types of fire, select & perform various Hose drill.	6.1 Select the types of suction and delivery hose.
	6.2 Identify the Causes of hose decay & its prevention
	6.3 Perform Use of percolating & non-percolating hose
	6.4 Identify hose reel, causes of decay and its care & maintenance.
	6.5 Identify Importance of hose reel hose in first aid fire fighting in buildings and industries.
	6.6 Plan of work in compliance with standard tests of delivery hoses.
	6.7 Perform Standard test of Suction hose
	6.8 Identify the different groups of hose fittings and their uses.
	6.9 Measure of deep lift suction fittings.
	6.10 Type of Breaching and its uses.
	6.11 Identify the hose ramps, care and maintenance of hose fittings.
	6.12 Describe basic science and physics related to combustion
	6.13 Describe Basic property of matter, types of matter & effect of the heat on matter.
	6.14 Define Vapour density, Relative density effect of density on the behaviour of gases.
	6.15 Define Melting & boiling point
	6.16 Describe heat and its effect on matter, measurement Units of temperature and interchange.
	6.17 Identify Flammable liquids, gases, & vapours specific heat, latent heat.
	6.18 Define combustion, fire triangle, Fire tetra hadrons.
	6.19 Knowledge of various types of chemicals in the trade.
	6.20 Identify the type of chemicals and their hazard in the place.
	6.21 Select the suitable chemicals on the workplace.
	6.22 Analyzed the effect of chemicals on the suitable jobs
7. Plan and perform fire fighting by using various	7.1 Classify the types of fire and suitability of fire extinguisher on particular class of fire.

types of fire extinguishers.	7.2	Install the wall fitting and test it.
	7.3	Technique of fire extinction Smothering Cooling and Starvation.
	7.4	Observe the halon and its detrimental effect on Environment.
	7.5	Observe the safety/precaution during the operation of
	7.6	Extinguisher.
	7.7	Store pressure type and Cartridge type fire extinguishers
	7.8	Working principle of DCP, CO ₂ , Mechanical Foam and Water type fire extinguishers.
8. Establish the fire suppression criteria, compare & create various methods of fire extinguishment.	8.1	Ascertain the fire prevention measures and its importance in preventing fires
	8.2	Identify and ascertain the trade tools practice their uses with prevention jobs, care & maintenance
	8.3	Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.
	8.4	Identify trade equipment and their uses.
	8.5	Classify the types and method of operation of Fire Extinguishers.
	8.6	Operate of the fire extinguisher as following PASS method.
	8.7	Identify the suitability of fire extinguishers
	8.8	Carry out care & maintenance of fire extinguishers
	8.9	Carry out care & maintenance of all Fixed Fire Fighting Installations.
	8.10	Observe general safety precaution and occupational Health and hygiene.
	8.11	Identify the hazards other than fire in the work place.
	8.12	Know the ERP of the work place.
	8.13	Brief the reporting system within organization & work place
	8.14	Ensure emergency Exit routes
	8.15	Know the procedure of control, containment and confinement procedures.
	8.16	Classify the water based and non-water based fixed fire fighting systems.
	8.17	Classify the Types of water sprinkler systems, fusible link sprinkler, Quartzoid bulb sprinkler, drenchers etc.
9. Identify water supply system, select and perform various Hydrant drill viz., 3 men, 4 men, etc.	9.1	Identify Water main, Risers, Down comer
	9.2	Identify the functional application of Deluge valve system.
	9.3	Describe the fixed Foam Installations.
	9.4	Identify the importance of Foam pourer in tank protection
	9.5	Identify the main water discharging sources, Hydrants, Monitors, HVWS, MVWS, HVLR
	9.6	Describe the total flooding system I.e. CO ₂ , FM-200.
10. Select & execute the functionality of ground ladder.	10.1	Describe the ladder used in fire services
	10.2	Brief the method of Pitching, ascending and descending the ladder.

	10.3 Perform leg lock and arm hold
	10.4 Perform the standard test of the strings, rounds and extending line.
11. Identify, select and make use of various small gears.	11.1 Classification of small gears
	11.2 Select and use various cutting and breaking tools.
	11.3 Select special types of small gears
	11.4 Perform testing and care and maintenance of small gears.
12. Identify, Select and perform various pump drill.	12.1 Classify the common type of pumps.
	12.2 Methods of priming.
	12.3 Select and testing fault finding.
	12.4 Introduction to centrifugal pump.
	12.5 Observe care maintenance and testing criteria of pump.
13. Select and ensure the use of Personal Protective Equipment (PPE).	13.1 Assign the personal protection equipment, their proper selection and their uses.
	13.2 Prepare care & maintenance respiratory and non respiratory Personal protective equipment.
	13.3 Explain the head protection, ear protection, Face & eye protection, hand protection, Foot protection& Body protection.
	13.4 Explain various types of respiratory PPE, types of breathing apparatus, SCBA- function of all parts, uses and donning & doffing of SCBA.
14. Classify various building construction structures and materials in relation to life safety.	14.1 Classification of buildings as per NBC
	14.2 Execute building materials & their behaviour under fire conditions.
	14.3 Knowledge of various types of occupancies and fire load, fire fighting techniques.
	14.4 Classification and Zoning of Building according their Fire Load
	14.5 Create of importance of fire escapes with respect to their Positioning
	14.6 Nos. of fire escape, escape routes and travelling distance
	14.7 Pressurization and illumination in escape route
	14.8 Arrange the reference to NBC part IV fire construction and provisioning of passive fire fighting technique.
15. Identify the procedure for making mechanical foam and establish its effectiveness in extinguishing class B fire	15.1 Classify the types of foam concentrates.
	15.2 Prepare & test foam making equipment-(mechanical foam).
	15.3 Knowledge of high expansion and low expansion foam.
	15.4 Special uses of Medium & High expansion foam
	15.5 Plan & prepare storage of foam compound.
	15.6 Preservation of Foam Concentrations.
	15.7 Type & Application of dry chemical powder.
	15.8 Identify the compatibility of Dry Powder with foam
	15.9 Know the application ratio of foam

	15.10 Calculate the requirement of total foam compound and water.
16. Define risk evaluation and control procedures. Identify the direct/indirect loss, mitigation measures, use of salvage sheets and salvage equipment.	16.1 Explain the direct and indirect loss due to fire incidents 16.2 Execute the mitigation measures for indirect loss. 16.3 Use of various Salvage sheets 16.4 Ascertain the care; maintenance and testing of salvage equipment. 16.5 Knowledge of occupational health hazards & dangerous properties of chemicals. 16.6 Analyzed the Dust Gases, Fumes, Mist, Vapours, Smoke and Aerosols. 16.7 Concepts of threshold limit value. 16.8 Classify Hazards.
17. Execute technical rescue, use of rope, lines and various knots.	17.1 Establish the risk assessment techniques 17.2 Describe Ropes & Lines. 17.3 Identify the knots and hitches. 17.4 Ascertain the testing of different types of lines. 17.5 Familiarization and practice with various rescue knots. 17.6 Prevent deterioration and damage to ropes & lines. 17.7 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 17.8 Identify the various tools and equipment use for rescue
18. Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty	18.1 Take the casualty in to the safe environment 18.2 Check properly and render first aid accordingly 18.3 Execute CPR if casualty found cardiac arrest 18.4 Execute artificial respiration in case of breathing arrest
19. Measure various capacities of water bodies and hydraulics in relation to water head, friction loss, velocity and water discharge.	19.1 Apply Method of carrying stretcher with casualty. 19.2 Select and apply the method of hydraulic test for fire extinguisher and SCBA set. 19.3 Identify the Method of standard test of ladder and small gears 19.4 Calculate capacity of tanks of given shapes and sizes.

NSQF QUALIFICATION FILE

Fireman

SECTION 2

25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Fireman		Level: 4	
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 different types of fire, select & perform various Hose drill. Establish the fire suppression criteria, compare & create various methods of fire extinguishment. Identify, select and make use of various small gears. Identify, Select and perform various pump drill. 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. Execute technical rescue, use of rope, lines and various knots. 	<p>In all the learning outcomes for example 'Establish the fire suppression criteria, compare & create various methods of fire extinguishment.' and 'Classify various building construction structures and materials in relation to fire and life safety.', the learner will be required to choose appropriate products, equipments, procedures as per the requirement of the job. The work will however be done within a limited range of activities, routine & predictable to achieve the tolerance levels and accuracy demanded as per the job.</p> <p>Thus the learner requires a limited range of activities, routine & predictable situation. And the NSQF level as per this descriptor will be 3.</p>	3

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty. 		
Professional knowledge	<p>Knowledge of Basic facts, process and principle applied in trade of employment</p> <ul style="list-style-type: none"> Anatomy of Fire: Definition of Combustion, Elements of Combustion, Products of combustion. Hose and Hose Fittings: Type of suction & Delivery Hoses, Material used in Construction. 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. Building Construction: Building Materials and their behaviour under fire conditions, sings of building collapse and rescue operation. 	<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 occurrence book.' , 'Fire Hazards in grasslands, Forest areas, rural areas and hay stacks.' etc.</p> <p>Hence NSQF Level is 3 for this descriptor.</p>	3

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Fireman

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> • Water Based- Riser mains- Wet Riser, Dry Riser, Hose reel installation, use and maintenance, introduction to hydrants, monitors. • Special features of water tender and special types of fire tenders(Foam tender, DCP Tender, CO2 tender, Multipurpose tender). • Special Services Calls: Introduction, Methods employed by fire service to rescue trapped persons in lifts, sewer, trapped under vehicle. • Fire Service Organization: Introduction of Fire Service Organization, Writing and importance of occurrence book. • Fire Hazards in grasslands, Forest areas, rural areas and hay stacks. 		
Professional skill	<ul style="list-style-type: none"> • Plan and perform fire fighting by using various types of fire extinguishers. • Establish the fire suppression criteria, compare & create various methods of fire extinguishment. • Select & execute the functionality of ground ladder. 	<p>The learner after the trainer will be able to recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and process as per the job given to them. This can be ascertained by reading the Assessment Criteria.</p> <p>The learner will also be responsible for own quality of work within specified limit and will have to use</p>	3

NSQF QUALIFICATION FILE

Fireman

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> • Select and ensure the use of Personal Protective Equipment (PPE). • 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. • Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest casualty. • Measure various capacities of water bodies & hydraulics in relation to water head, friction loss, velocity and water discharge. 	<p>quality products to check own work to ensure conformance to requirements of the job.</p> <p>Hence NSQF Level is 3 for this descriptor.</p>	
Core skill	<p>Organising information and communication</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. • Obtain sources of information and recognize information. • Use documents and technical regulations and occupationally related provisions. • Conduct appropriate and target oriented discussions with higher authority and within 	<p>The work of Fireman involves personality development, holistic massages, applying various forms of hydrotherapy related to all modalities which requires competence in written language with minimum required clarity in order to understand the work enlisted in the job card/service card.</p> <p>The learner will also need to communicate with team supervisor to understand the job and explain ones work which requires competence in oral language,</p>	4

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<p>the team.</p> <ul style="list-style-type: none"> Present facts and circumstances, possible solutions & use English special terminology. <p>Understanding of social/political</p> <ul style="list-style-type: none"> Understand and explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources. Explain entrepreneurship and manage/organize related task in day to day work for personal & societal growth. Comply 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 	<p>with required clarity.</p> <p>The learner will also need to have basic understanding of social political and natural environment as mentioned in the learning outcome for example 'Comply environment regulation and housekeeping'</p> <p>Hence NSQF Level is 3 for this descriptor.</p>	

NSQF QUALIFICATION FILE

Fireman

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> Recognize different components of 5S and apply the same in the working environment. 		
Responsibility	<ul style="list-style-type: none"> Identify different types of fire, select & perform various Hose drill. Establish the fire suppression criteria, compare & create various methods of fire extinguishment. Identify water supply system, select and perform various Hydrant drill viz., 3 men, 4 men, etc. Identify, select and make use of various small gears. Identify, Select and perform various pump drill. 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. Execute technical rescue, use of rope, lines and various knots. Perform first aid to casualty, give CPR and artificial respiration to the breathing arrest 	<p>The Fireman has to perform all the learning outcomes under close supervision and as per requirements of the job, hence is responsible for own work within defined limit.</p> <p>Hence NSQF Level is 3 for this descriptor.</p>	3

NSQF QUALIFICATION FILE

Fireman

Title/Name of qualification/component: Fireman		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	casualty.		

NSQF QUALIFICATION FILE

Fireman

OPTION B

Title/Name of qualification/component: Enter the title here number			Level: Add level
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	NSQF Level
Process			
Professional knowledge			
Professional skill			
Core skill			
Responsibility			

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="339 472 1209 1301"> <thead> <tr> <th data-bbox="339 472 627 613">Basis</th> <th data-bbox="627 472 1209 613">In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</th> </tr> </thead> <tbody> <tr> <td data-bbox="339 613 627 779">Need of the qualification</td> <td data-bbox="627 613 1209 779">The proposed qualification is running in the system for last few decades and passed out candidates are engaged in various related industries.</td> </tr> <tr> <td data-bbox="339 779 627 1099">Industry Relevance</td> <td data-bbox="627 779 1209 1099">The job role defined for the qualification is as per the National Qualification of Occupation 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. This justifies the qualification is very much relevance for industry.</td> </tr> <tr> <td data-bbox="339 1099 627 1218">Usage of the qualification</td> <td data-bbox="627 1099 1209 1218">The Proposed qualification is running in ITI system across the country successfully over the period of time.</td> </tr> <tr> <td data-bbox="339 1218 627 1301">Estimated uptake</td> <td data-bbox="627 1218 1209 1301">The present seating capacity is approximately 962.</td> </tr> </tbody> </table>	Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)	Need of the qualification	The proposed qualification is running in the system for last few decades and passed out candidates are engaged in various related industries.	Industry Relevance	The job role defined for the qualification is as per the National Qualification of Occupation 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. This justifies the qualification is very much relevance for industry.	Usage of the qualification	The Proposed qualification is running in ITI system across the country successfully over the period of time.	Estimated uptake	The present seating capacity is approximately 962.
Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)										
Need of the qualification	The proposed qualification is running in the system for last few decades and passed out candidates are engaged in various related industries.										
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Usage of the qualification	The Proposed qualification is running in ITI system across the country successfully over the period of time.										
Estimated uptake	The present seating capacity is approximately 962.										
27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences.</p> <p>This qualification is run by Ministry of Skill Development and Entrepreneurship and different industries under the related line ministry are also generally consulted before finalizing the curricula.</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 NCVT for the Craftsmen Training Scheme and is in existence for the last 60 years. NCVT has been entrusted with the responsibilities of prescribing standards and curricula for craftsmen training, advising the Government of India on the overall policy and programmes, conducting All India Trade Tests and awarding National Trade Certificates.</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</p>										

	<p>qualification(s) be revised or updated? Specify the review process here</p> <ul style="list-style-type: none"> • Mentor Council (MC) for the Safety and Security Sector was formed in 2014 to review the curriculum of this qualification under the sector. • CSTARI, the research wing of DGT, reviews and updates the qualification, in consultation with industries and other stakeholders, on a regular basis by conducting trade committee meetings. • DGT will keep on doing continuous comparative study in the trade by referring to relevant upcoming qualifications in the National Qualifications Register (NQR) and relevant sectors.
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Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

SECTION 4 **EVIDENCE OF PROGRESSION**

30	<p>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?</p> <p><i>Show the career map here to reflect the clear progression</i></p> <ul style="list-style-type: none"> • Qualifying trainee will obtain an NCVT Certificate in Fireman trade which gives the following options of progression to the trainee: <ol style="list-style-type: none"> i) Can join as Fire Fighter in Industry ii) Can join Apprenticeship programme in different types of industries leading to National Apprenticeship certificate (NAC). iii) Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs.
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Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.