









# **Model Curriculum**

**QP Name: Assistant Construction Fitter** 

QP Code: CON/Q1202

Version: 3.0

**NSQF Level: 3** 

**Model Curriculum Version: 3.0** 

Construction Skill Development Council of India | | Tower 4B, DLF Corporate Park, 201&, 202 4B, Mehrauli-Gurgaon Rd, DLF Phase 3, Gurugram, Haryana 122002









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# **Training Parameters**

Sector	Construction
Sub-Sector	Real Estate and Infrastructure Construction
Occupation	Fabrication
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7214.0800
Minimum Educational Qualification and Experience	Grade 10 Pass  OR  Grade 8 pass with 2-year of (NTC/ NAC) after 8th  OR  9th grade pass with 1-year relevant experience  OR  8th grade pass with 2-year relevant experience  OR  5th grade pass with 5-year relevant experience  OR  Previous relevant Qualification of NSQF Level 2 with 3-year relevant experience  OR  Previous relevant qualification of NSQF Level 2.5 with 1.5 relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	31/08/2023
Next Review Date	31/08/2026
NSQC Approval Date	31/08/2023
QP Version	3.0
Model Curriculum Creation Date	31/08/2023
Model Curriculum Valid Up to Date	31/08/2026
Model Curriculum Version	3.0









Minimum Duration of the Course	300 Hours
Maximum Duration of the Course	300 Hours









## **Program Overview**

This section summarises the end objectives of the program along with its duration.

#### **Training Outcomes**

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Elucidate ways to assist in marking and fit-up of structural steel elements.
- Describe the process of using relevant tools and tackles to handle heavy materials used in fit-up of fabricated components.
- Elucidate ways to assist in preparatory activities, edge reparation and positioning of steel sections for fit-up.
- Explain the importance of working effectively in a team to deliver desired results at the workplace.
- Explain the importance of working according to personal health, safety and environment protocols at construction site.

#### **Compulsory Modules**

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
CON/N1203: Assist in marking and fit-up of structural steel elements NOS Version- 4.0 NSQF Level- 3	30:00	30:00	30:00	00:00	90:00
Module 1: Introduction to the role of a Assistant Construction Fitter	05:00	00:00	00:00	00:00	05:00
Module 2: Process of assisting in marking and fitup of structural steel elements	25:00	30:00	30:00	00:00	85:00
CON/N1204: Use relevant tools and tackles to handle heavy materials used in fitup of fabricated components NOS Version- 4.0 NSQF Level- 3	30:00	30:00	00:00	00:00	60:00
Module 3: Process of using relevant tools and tackles	30:00	30:00	00:00	00:00	60:00









to handle heavy materials used in fit-up of fabricated components					
CON/N1205: Assist in preparatory activities, edge reparation and positioning of steel sections for fit-up NOS Version- 4.0 NSQF Level- 3	20:00	10:00	30:00	00:00	60:00
Module 4: Process of assisting in preparatory activities, edge reparation and positioning of steel sections for fit-up	20:00	10:00	30:00	00:00	60:00
CON/N8001: Work effectively in a team to deliver desired results at the workplace NOS Version- 12.0 NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 5: Work effectively in a team to deliver desired results at the workplace	05:00	25:00	0:00	00:00	30:00
CON/N9001: Work according to personal health, safety and environment protocols at construction site  NOS Version- 10.0  NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 6: Follow safety norms as defined by organization, adopt healthy and safe work practices	05:00	25:00	0:00	00:00	30:00
DGT/VSQ/N0101: Employability Skills NOS Version- 1.0 NSQF Level- 2	30:00	00:00	0:00	00:00	30:00
Module 7: Employability Skills	30:00	00:00	0:00	00:00	30:00
Total Duration	120:00	120:00	60:00	00:00	300:00









## **Module Details**

## Module 1: Introduction to the role of an Assistant Construction Fitter Mapped to CON/N1203 v4.0

#### **Terminal Outcomes:**

• Discuss the job role of an Assistant Construction Fitter.

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Describe the size and scope of the Construction industry and its sub- sectors.</li> </ul>	
<ul> <li>Discuss the role and responsibilities of an Assistant Construction Fitter.</li> </ul>	
<ul> <li>Identify various employment opportunities for an Assistant Construction Fitter.</li> </ul>	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whit	eboard, Marker, Projector, Laptop, Video Films
Tools, Equipment and Other Requirements	
NA	









# Module 2: Process of assisting in marking and fit-up of structural steel elements

Mapped to CON/N1203 v4.0

#### **Terminal Outcomes:**

• Elucidate ways to measure and mark structural steel elements.

#### **Classroom Aids**

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

#### **Tools, Equipment and Other Requirements**

Hand Gloves, Apron Leather, Gas Welding Goggles with Colour Glass, Chipping Hammer, Chisel, Clamps, Trolley for Cylinder, Cutting Cart, Head Protector, Electrodes, Cutting Guides, Power Source and Compression Unit With Internal Cooling System, Exhaust Fan, Light Source, Leather Hand Gloves, Jump Suit, Wire Brush, Hand & Leg Guards Leather, Safety Goggles, Nose Mask, Ear Protection, Fire Extinguishers, Welding Glass, Flashback Arrestors, Welding Helmet, Gas Pressure, Measuring Guage, Plasma Cutting Torch, Nozzle With Consumables (Tip and Cap), Reflecting Jackets, Safety Helmet, Safety Belts, Safety Shoes, Gum Shoes, First Aid Box, Safety Board









# Module 3: Process of using relevant tools and tackles to handle heavy materials used in fit-up of fabricated components

### Mapped to CON/N1204 v4.0

#### **Terminal Outcomes:**

- Explain the importance of following health and safety practices.
- Describe the process of using appropriate tools and tackles in fit-up.
- Elucidate ways to shift structural steel sections.

<u>'</u>	
Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>List different hand and power tools available in market for fabrication activity.</li> <li>Explain the use of common</li> </ul>	<ul> <li>Demonstrate how to use the appropriate Personal Protective Equipment (PPE) as per the supervisor's instructions.</li> </ul>
<ul> <li>fabrication hand and power tools.</li> <li>Elucidate the correct use of different tools and tackles as per the work requirement.</li> </ul>	<ul> <li>Show how to collect and dispose of waste and unwanted materials in an environment-friendly manner.</li> <li>Demonstrate the use of correct tools</li> </ul>
<ul><li>Explain how to use the tools in optimized manner.</li><li>State the tolerance limits and range</li></ul>	and tackles for marking, liner and angular measurements, e.g. scriber, divider, punch, steel ruler, measuring tape, angle gauge, etc.
<ul><li>of operation for common hand and power tools.</li><li>Explain the application of relevant</li></ul>	<ul> <li>Show how to hold and tighten metal pieces using the appropriate tools and tackles, such as wrenches, vices,</li> </ul>
ergonomic principles in carrying loads.  • List various tools and tackles to be	<ul> <li>clamps etc.</li> <li>Show how to cut and strike metal using correct tools, such as file, chisel,</li> </ul>
<ul><li>used in basic rigging work.</li><li>Discuss standard practices regarding</li></ul>	hammer, etc.  • Demonstrate how to use different
heavy material lifting and shifting.  • Explain various safety measures to be	types of lifting and shifting arrangements such as chain pulley
taken while object to be shifted is in motion.	<ul><li>blocks, trolleys, etc.</li><li>Demonstrate the process of</li></ul>
<ul> <li>Describe the correct posture of lifting equipment during lifting and shifting an object</li> </ul>	performing basic maintenance of tools and tackles.
<ul> <li>an object.</li> <li>Explain the importance of adhering to load lifting capacity of lifting equipment.</li> </ul>	<ul> <li>Demonstrate the process of performing visual checks on lifting tools and accessories, e.g. sling, rope, clamp, hook, etc., to ensure they are in usable condition.</li> </ul>
<ul> <li>Explain different hazards associated with fabrication work.</li> <li>Discuss safety guidelines for fabrication work.</li> </ul>	<ul> <li>Show how to control the position of suspended objects during shifting by using tagline, mobile hydraulic lifting equipment, etc.</li> </ul>









 Show how to stack heavy objects appropriately as per the supervisor's instructions.

#### **Classroom Aids**

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films

#### **Tools, Equipment and Other Requirements**

Hand Gloves, Apron Leather, Gas Welding Goggles with Colour Glass, Chipping Hammer, Chisel, Clamps, Trolley for Cylinder, Cutting Cart, Head Protector, Electrodes, Cutting Guides, Power Source and Compression Unit With Internal Cooling System, Exhaust Fan, Light Source, Leather Hand Gloves, Jump Suit, Wire Brush, Hand & Leg Guards Leather, Safety Goggles, Nose Mask, Ear Protection, Fire Extinguishers, Welding Glass, Flashback Arrestors, Welding Helmet, Gas Pressure, Measuring Guage, Plasma Cutting Torch, Nozzle With Consumables (Tip and Cap), Reflecting Jackets, Safety Helmet, Safety Belts, Safety Shoes, Gum Shoes, First Aid Box, Safety Board









# Module 4: Process of assisting in preparatory activities, edge reparation and positioning of steel sections for fit-up

#### Mapped to CON/N1205 v4.0

#### **Terminal Outcomes:**

- Explain the process of preparing fabrication platform for fit-up operations.
- Explain the process of preparing the edges of the components of assemblies.
- Elucidate ways to position and fix structural elements.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Explain how to identify the scrap metal on the fabrication platform according to section and dimensions.</li> </ul>	<ul> <li>Show how to clean the platform to remove any scrap metal and dispose it of as per given instructions.</li> </ul>
<ul> <li>Explain the importance of housekeeping in fabrication activities.</li> </ul>	<ul> <li>Demonstrate how to dismantle the previously installed temporary anchors and supports.</li> </ul>
<ul> <li>List the terminology relevant to fabrication activities.</li> <li>Explain how to install temporary supports and clamps for securing the</li> </ul>	<ul> <li>Demonstrate ways to position the components/ sections on the fabrication platform as per the supervisor's instructions.</li> </ul>
workpiece and restricting its movement.	<ul> <li>Show how to mark the positions of the edges to be prepared as per the hand sketches and given instructions.</li> </ul>
<ul> <li>Explain the importance of clamps and its functions in fit-up work.</li> </ul>	Demonstrate ways to determine the
<ul> <li>List the steps involved in removing the workpiece from the platform</li> </ul>	orientation of bevel and scallop from the supervisor.
<ul> <li>after fit-up.</li> <li>Discuss the working principle of jacks (hydraulic and pneumatic) and their uses.</li> </ul>	<ul> <li>Demonstrate the process of carrying out scalloping and beveling by operating the bevelling machine as required, following the relevant safety measures.</li> </ul>
<ul> <li>Explain the importance of maintaining proper orientation of the workpiece.</li> </ul>	<ul> <li>Demonstrate the process of carrying out jacking or striking operations to rectify minor defects as per the</li> </ul>
<ul> <li>Describe the steps to be taken to carry out surface finishing before</li> </ul>	supervisor's instructions.  Show how to position the structural
<ul><li>fitting.</li><li>Explain how to check the dimensions</li></ul>	components on the fabrication platform as per the given
of the workpiece during fit-up.	instructions, ensuring their correct position and orientation.
<ul> <li>Explain the importance of accurate fit-up.</li> </ul>	Show how to adjust the fit-up
<ul> <li>Elucidate the meaning, causes and effects of welding shrinkage.</li> </ul>	correctly using striking, jacking or other methods as per the supervisor's instruction.
<ul> <li>Explain the distortion control techniques and their areas of</li> </ul>	Show how to mark the locations for









applications.

tack welds as per the given instructions.

- Demonstrate how to check the dimensions of the assembly after tack welding.
- Demonstrate how to remove the fitted section/ assembly by loosening the clamps, vices etc.
- Show how to lift and shift materials using ropes, belts or other appropriate accessories as instructed.

#### **Classroom Aids**

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films

#### **Tools, Equipment and Other Requirements**

Hand Gloves, Apron Leather, Gas Welding Goggles with Colour Glass, Chipping Hammer, Chisel, Clamps, Trolley for Cylinder, Cutting Cart, Head Protector, Electrodes, Cutting Guides, Power Source and Compression Unit With Internal Cooling System, Exhaust Fan, Light Source, Leather Hand Gloves, Jump Suit, Wire Brush, Hand & Leg Guards Leather, Safety Goggles, Nose Mask, Ear Protection, Fire Extinguishers, Welding Glass, Flashback Arrestors, Welding Helmet, Gas Pressure, Measuring Guage, Plasma Cutting Torch, Nozzle With Consumables (Tip and Cap), Reflecting Jackets, Safety Helmet, Safety Belts, Safety Shoes, Gum Shoes, First Aid Box, Safety Board









# Module 5: Work effectively in a team to deliver desired results at the workplace

### Mapped to CON/N8001 v12.0

#### **Terminal Outcomes:**

- Explain the importance of interacting and communicating in an effective manner.
- Elucidate ways to support co-workers to execute the project requirements.
- Elucidate ways to practice inclusion at workplace.

Duration: 05:00	Duration: 25:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Elucidate own roles and responsibilities.</li> <li>Explain the importance of effective communication.</li> <li>Elucidate the consequence of poor teamwork on project outcomes, timelines, safety at the construction site, etc.</li> <li>Explain different modes of communication used at workplace.</li> <li>Explain the importance of creating healthy and cooperative work environment among the gangs of workers.</li> <li>Elucidate applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement.</li> <li>Explain the importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timeliness, safety, risks at the construction project site.</li> <li>Explain the importance and need of supporting co-workers facing problems for the smooth functioning of work.</li> <li>Discuss the fundamental concept of</li> </ul>	
<ul> <li>gender equality.</li> <li>Explain how to recognise and be sensitive to issues of disability,</li> </ul>	
<ul><li>culture and gender.</li><li>Discuss legislation, policies, and</li></ul>	









procedures relating to gender sensitivity and cultural diversity including their impact on the area of operation.

#### **Classroom Aids**

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films

#### **Tools, Equipment and Other Requirements**

NA









# Module 6: Work according to personal health, safety and environment protocols at construction site

Mapped to NOS CON/N9001 v10.0

#### **Terminal Outcomes:**

- Explain the importance of following safety norms as defined by organization.
- Explain the need to adopt healthy & safe work practices.
- Describe the process of implementing good housekeeping and environment protection process and activities.
- Explain the importance of following infection control guidelines as per applicability

Ouration: 05:00	Duration: 25:00
heory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Describe the reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines.</li> <li>Explain different types of safety hazards at construction sites.</li> </ul>	<ul> <li>Demonstrate how to follow emergency and evacuation procedures in case of accidents, fires, or natural calamities.</li> <li>Show how to operate different types of fire extinguishers corresponding to</li> </ul>
<ul> <li>Discuss basic ergonomic principles as per applicability.</li> </ul>	various types of fires as per EHS guidelines.
<ul> <li>Describe the procedure for responding to accidents and other emergencies at site.</li> </ul>	<ul> <li>Demonstrate the use of appropriate Personal Protective Equipment (PPE) as per work requirements for Head Protection, Ear Protection, Fall</li> </ul>
<ul> <li>Explain the importance of handling tools, equipment, and materials as per applicable norms.</li> </ul>	Protection, Foot Protection, Face and Eye Protection, Hand and Body Protection, and Respiratory
<ul> <li>Explain the effect of construction material on health and environments as per applicability.</li> </ul>	<ul><li>Protection (if required).</li><li>Demonstrate how to check and install all safety equipment as per standard</li></ul>
<ul> <li>Describe various environmental protection methods as per applicability.</li> </ul>	<ul><li>guidelines.</li><li>Show how to collect, segregate and deposit construction waste into</li></ul>
<ul> <li>Explain the storage requirement of waste including non-combustible scrap material and debris, combustible scrap material and debris, general construction waste and trash (non-toxic, non- hazardous), any other hazardous wastes and any other flammable wastes at the appropriate location.</li> </ul>	<ul> <li>appropriate containers based on their toxicity or hazardous nature.</li> <li>Show how to clean and disinfect all materials, tools and supplies before and after use.</li> </ul>
<ul> <li>Explain how to use hazardous material in a safe and appropriate manner as per applicability.</li> </ul>	
• Explain types of fire.	









- Describe the procedure of operating different types of fire extinguishers.
- State safety relevant to tools, tackles, and equipment as per applicability.
- List housekeeping activities relevant to task.
- Elucidate ways of transmission of infection
- Elucidate ways to manage infectious risks at the workplace.
- Describe different methods of cleaning, disinfection, sterilization, and sanitization.
- List the symptoms of infection like fever, cough, redness, swelling, and inflammation.

#### **Classroom Aids:**

Black/White board, marker, Projector/LED Monitor, Computer, Trade specific charts, Safety tags, Safety Notice board, registers and other teaching aids

#### **Tools, Equipment and Other Requirements**

Leather Hand Gloves, Jumpsuit, Wire brush, Hand and Leg guard leather, Safety goggles, Nose mask, Ear protection, Fire extinguishers, Sand buckets Flashback arrestors, Welding helmet, Welding glass, Fire Extinguisher, Fire prevention kit, First Aid box, Safety tags, Safety Notice board









# Module 7: Employability Skills Mapped to NOS DGT/VSQ/N0101 v1.0

Duration: 30:00

#### **Key Learning Outcomes**

#### **Introduction to Employability Skills Duration: 1 Hour**

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

#### **Constitutional values - Citizenship Duration: 1 Hour**

- 2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
- 3. Show how to practice different environmentally sustainable practices

#### Becoming a Professional in the 21st Century Duration: 1 Hours

- 4. Discuss 21st century skills.
- 5. Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mind set in different situations.

#### **Basic English Skills Duration: 2 Hours**

6. Use appropriate basic English sentences/phrases while speaking

#### **Communication Skills Duration: 4 Hour**

- 7. Demonstrate how to communicate in a well -mannered way with others.
- 8. Demonstrate working with others in a team

#### **Diversity & Inclusion Duration: 1 Hour**

- 9. Show how to conduct oneself appropriately with all genders and PwD
- 10. Discuss the significance of reporting sexual harassment issues in time

#### **Financial and Legal Literacy Duration: 4 Hours**

- 11. Discuss the significance of using financial products and services safely and securely.
- 12. Explain the importance of managing expenses, income, and savings.
- 13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

#### **Essential Digital Skills Duration: 3 Hours**

- 14. Show how to operate digital devices and use the associated applications and features, safely and securely
- 15. Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely

#### **Entrepreneurship Duration: 7 Hours**

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

#### **Customer Service Duration: 4 Hours**

- 17. Differentiate between types of customers
- 18. Explain the significance of identifying customer needs and addressing them
- 19. Discuss the significance of maintaining hygiene and dressing appropriately

#### **Getting ready for apprenticeship & Jobs Duration: 2 Hours**

- 20. Create a biodata
- 21. Use various sources to search and apply for jobs
- 22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview
- 23. Discuss how to search and register for apprenticeship opportunities









### **Module 8: On-the-Job Training**

**Mapped to Assistant Construction Fitter** 

Mandatory Duration: 60:00 Recommended Duration: 00:00

**Location: On-Site** 

#### **Terminal Outcomes**

- Explain the applicable housekeeping practices to be followed to keep the work area clean.
- Conduct linear measurements, such as length, width, and diameter, using measuring tools, such as tapers, rulers, calipers, etc.
- Mark the position of bolts, plates or sections for fit-up as per the given instructions.
- Collect and dispose of waste and unwanted materials in an environment-friendly manner.
- Use different types of lifting and shifting arrangements such as chain pulley blocks, trolleys, etc.
- Carry out scalloping and beveling by operating the bevelling machine as required, following the relevant safety measures.
- Lift and shift materials using ropes, belts or other appropriate accessories as instructed.
- Operate different types of fire extinguishers corresponding to various types of fires as per EHS guidelines.
- Check and install all safety equipment as per standard guidelines.









## **Annexure**

## **Trainer Requirements**

Trainer Prerequisites						
Minimum Educational	Specialisation		Relevant Industry Experience		ng Experience	Remarks
Qualification		Years	Specialization	Years	Specialization	
B. Tech	Civil/Mechanic al/ Electrical	1	Fabrication	0	-	
Diploma	Civil/Mechanic al/ Electrical	2	Fabrication	0	-	
ITI	Civil/Mechanic al/ Electrical	4	Fabrication	0	-	
General BA/BSc./ EX- Army/ 12th	Civil/Mechanic al/ Electrical	4	Fabrication	0	-	

Trainer Certification				
Domain Certification	Platform Certification			
Certified for Job Role "Assistant Construction Fitter", mapped to QP: "CON/Q1202, v3.0", Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer (VET and skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". The minimum accepted score is 80%.			









### **Assessor Requirements**

Assessor Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience			Training/Assessment Experience	
Qualification		Years	Specialization	Years	Specialization	
B. Tech	Civil/Mechanical/ Electrical	2	Fabrication	0	-	
Diploma	Civil/Mechanical/ Electrical	4	Fabrication	0	-	
ITI	Civil/Mechanical/ Electrical	5	Fabrication	0	-	

Assessor Certification				
Domain Certification	Platform Certification			
Certified for Job Role "Assistant Construction Fitter", mapped to QP: "CON/Q1202 v3.0", Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: "Assessor (VET and skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0". The minimum accepted score is 80%.			









#### **Assessment Strategy**

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

#### 1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SIP
- The batch allocation Matrix prepared for each month based on previous months' performance of AAs, which determines the quantum of Assessment which can be allocated to each AA for a month
- Post allocation of assessment, Assessment agencies send the assessment confirmation to SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process.

#### 2. Testing Environment:

- A combination of Theory and practical/demonstration test is deployed to assess knowledge and Skill respectively of Learners.
- Assessment is conducted at Training center in in-person/offline mode
- For Skill assessment, environment is simulated to create a realistic Working Environment that should replicate the key features of the workplace. In job roles, where it is difficult to replicate the same, the OJT assessment is implemented.
- During the practical task, trainees are assessed on their workmanship, quality of finished
  product, time management, etc., based on the performance criteria (PC), knowledge and
  understanding and their professional and soft skills as specified in the qualification pack.
- Knowledge assessment is done through closed ended questions up to level 4 and from level 5 onwards, it is mixture of open ended and closed ended questions

#### 3. Assessment Quality Assurance levels/Framework

- Assessment criteria is developed for each QP which acts as a guide for developing question set /banks
- Sample questions aligned with Assessment criteria for each QP are developed by SSC and validated by industry
- Taking reference of Assessment criteria and Sample Questions, AAs create the question bank which is further validated by SSC
- Questions are mapped to the specified assessment criteria
- It is mandatory that Assessor and Trainer must be ToA certified & ToT Certified respectively
- Continuous Monitoring through virtual and In-person mode are conducted to ensure the assessment is conducted as per stipulated process
- Process and Technical audit of assessment batches by quality team are conducted to avoid the errors in assessment process









- A well -defined comprehensive framework of NON-COMPLIANCE MATRIX is defined and implemented to identify the non-compliance made by assessor and AA and punitive actions are taken correspondingly.
- The capacity building sessions are conducted regularly for assessors and assessment agencies to update them about best practices in assessment

#### 4. Types of evidence or evidence-gathering protocol:

- Post Assessment, the evidences are uploaded by Assessor to assessment agency and further assessment agency to SSC as per stipulated TAT
- Evidences are broadly the photographic and video graphic in nature
- Assessment agencies upload the evidence on SIP and detailed evidence on SSC digital platform (ZoHO)
- Evidences are; NOS wise-Geotagged photographs and videos of Theory Test & Practical Tasks, Attendance sheet, result summary sheet, group photographs.

#### 5. Method of verification or validation:

- The process and technical audit of assessment batches are done by SSC
- Attendance of each candidate is verified and it is ensured that only those candidates are assessed by assessors who are meeting the stipulated minimum percentage of attendance
- The result of each candidate is verified, it is verified that that result on SIP are matching with respect to summary sheet submitted by AAs
- Under detailed technical audit for sample of batches, the knowledge and skill assessment results for each candidate is checked in technical aspect.
- All the evidences of batches are preserved on server of SSC digital platform

#### On the Job:

 On job training (OJT), candidates undergo training and leaning at actual workplace for a fixed period of time and a certain weightage of assessment is allocated out of total skill weightage of Qualification Pack for undergoing OJT as stipulated by CSDCI. This OJT score and assessors' end point score are combined to arrive at final Marking/grading of trainees' skill test. The OJT score is determined by Supervisor of company under which candidates undergo on job training.









### References

**Glossary** 

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do it upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.









### **Acronyms and Abbreviations**

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
CSDCI	Construction Skill development Council of India
MCQ	Multiple Choice Question
EHS	Environment Health and Safety
IPS	Indian Patent Stone
VDF	Vacuum Dewatering Flooring