



Model Curriculum

QP Name: Khalasi (Assistant Rigger)

QP Code: CON/Q0701

Version: 3.0

NSQF Level: 3.0

Model Curriculum Version: 3.0

Construction Skill Development Council of India || Tower 4B, DLF Corporate Park, 201&, 202 4B,
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Table of Contents

Contents

Training Parameters.....	3
Program Overview	5
Training Outcomes.....	5
Compulsory Modules.....	5
Module 1: Introduction to the role of Khalasi (Assistant Rigger)	8
Module 2: Shifting RCC precast/ structural steel units at construction sites	9
Module 3: Preparation of the surface of RCC precast units or structural steel units.....	11
Module 4: Laying and dismantling concrete pump line.....	13
Module 5: Staging for heavy RCC work.....	15
Module 6: In-situ RCC piling work.....	16
Module 7: Work effectively in a team to deliver desired results at the workplace	18
Module 8 Work according to personal health, safety and environment protocols at construction site	20
Module 9: Employability Skills	22
Module 10: On-the-Job Training.....	23
Annexure.....	24
Trainer Requirements	24
Assessor Requirements.....	25
Assessment Strategy	26
Assessment system Overview.....	Error! Bookmark not defined.
Testing Environment	Error! Bookmark not defined.
Assessment Quality Assurance Framework	Error! Bookmark not defined.
Methods of Validation	Error! Bookmark not defined.
Method of assessment documentation and access	Error! Bookmark not defined.
Acronyms and Abbreviations.....	29



Training Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure Construction
Occupation	Rigging
Country	India
NSQF Level	3.0
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7215.1000
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	360 Hours
Maximum Duration of the Course	360 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:

- Demonstrate the use of appropriate rigging gear, hand tools and PPEs in rigging operations.
- Explain how to shift RCC precast units or steel components.
- Demonstrate sandblasting to clean the surface impurities of structural steel and precast RCC sections.
- Demonstrate epoxy glueing on segmental RCC precast units for construction works.
- Explain how to shift and clean the pipe segments used in the concrete pump line.
- Demonstrate how to set up and dismantle the concreting pump line.
- Explain how to shift and stack staging components.
- Demonstrate the process of erecting and dismantling staging.
- Demonstrate preparatory works performed before in-situ RCC piling works.
- Demonstrate how to establish pipelines, winches and pumps for piling operation.
- Demonstrate effective communication with co-workers, superiors and sub-ordinates.
- Explain how to support co-workers, superiors and subordinates to ensure the effective execution of assigned tasks.
- Explain the applicable measures to ensure health and safety at construction sites.
- Explain the appropriate employability skills.

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/N0701: Shift RCC precast/ structural steel units at construction sites NOS Version- 3.0 NSQF Level- 3.0	15:00	15:00	30:00	00:00	60:00
Module 1: Introduction to the role of Khalasi (Assistant Rigger)	05:00	00:00	0:00	00:00	05:00
Module 2: Shifting RCC precast/ structural steel units at construction sites	10:00	15:00	30:00	00:00	55:00
CON/N0702: Prepare the surface of RCC precast	20:00	40:00	0:00	00:00	60:00



units or structural steel units NOS Version- 3.0 NSQF Level- 3.0					
Module 3: Preparation of the surface of RCC precast units or structural steel units	20:00	40:00	0:00	00:00	60:00
CON/N0703: Lay and dismantle concrete pump-line NOS Version- 3.0 NSQF Level- 3.0	15:00	15:00	30:00	00:00	60:00
Module 4: Laying and dismantling concrete pump line	15:00	15:00	30:00	00:00	60:00
CON/N0704: Assist in carrying out staging for heavy RCC work NOS Version- 3.0 NSQF Level- 3.0	15:00	15:00	0:00	00:00	30:00
Module 5: Staging for heavy RCC work	15:00	15:00	0:00	00:00	30:00
CON/N0705: Assist in in-situ RCC piling work NOS Version- 3.0 NSQF Level- 3.0	15:00	45:00	0:00	00:00	60:00
Module 6: In-situ RCC piling work	15:00	45:00	0:00	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 7: 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 8: Work according to personal health, safety and environment protocols at construction site	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 9: Employability Skills	30:00	00:00	0:00	00:00	30:00
Total Duration	120:00	180:00	60:00	00:00	360:00



Module Details

Module 1: Introduction to the role of Khalasi (Assistant Rigger)

Mapped to CON/N0701 v3.0

Terminal Outcomes:

- Discuss the job role of a Khalasi (Assistant Rigger).

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none">• Describe the size and scope of the Construction industry and its sub-sectors.• Discuss the role, responsibilities and personal attributes of a Khalasi (Assistant Rigger).• Identify the employment and career progression opportunities for a Khalasi (Assistant Rigger).• Explain the basic terms used in rigging.	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	



Module 2: Shifting RCC precast/ structural steel units at construction sites

Mapped to CON/N0701 v3.0

Terminal Outcomes:

- Explain the selection and use of appropriate rigging gear for RCC precast and structural steel units/ sections/ assemblies.
- Demonstrate the process of shifting RCC precast and structural steel units/ sections/ assemblies.

Duration: 10:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the criteria for selecting appropriate rigging gear such as pulley, chain block, slings, wire rope, heavy lifting chains, shackles, hooks, ropes, etc. ● List different types of heavy materials commonly handled at construction sites such as RCC precast and structural steel sections/ assemblies. ● Explain the importance of checking the tools, rigging gear and PPE for their usability before use ● Explain the importance of identifying and removing any obstructions from the lifting equipment operation area ● Elaborate on how to determine the suitability of the loading and unloading area for heavy loads ● Discuss the appropriate safety signage, illumination, and barricading required in the route of material shifting. ● Explain the requirement of placing the appropriate supports, frames, blocking and cushioning on the deck of the transporting vehicle to transport precast or structural steel units. ● Discuss the use of suitable materials, such as wooden sleepers on the base to create ground clearance for the materials and provision for further lifting. 	<ul style="list-style-type: none"> ● Demonstrate the use of appropriate hand tools, rigging gear and Personal Protection Equipment (PPE) for lifting and shifting heavy material. ● Demonstrate the basic repair and maintenance of rigging gear and relevant tools. ● Elaborate on how to determine the suitability of loading and unloading areas for heavy loads. ● Show how to prepare heavy loads for lifting. ● Demonstrate the use of earth-moving equipment or compactors to prepare the base for heavy lifting equipment. ● Show how to anchor units to the appropriate locations and hook them up with the prescribed lifting equipment by using slings, shackles, ropes or lifting hooks. ● Demonstrate the process of loading precast or structural steel units in the transporting vehicle and unloading them to the ground safely. ● Demonstrate the use of tag lines to control the position of suspended loads during shifting. ● Show how to place and de-sling materials on the sleepers safely.

<ul style="list-style-type: none"> ● Discuss the importance of personal protection and the use of relevant safety gear in rigging activities. ● Discuss different units of linear measurement. ● Explain how to interpret different signals by the signaller during rigging. ● Explain the dos and don'ts for carrying out rigging operations at construction sites. ● Discuss the importance of barricading the lifting area and maintaining an appropriate distance from the load. 	<ul style="list-style-type: none"> ● Demonstrate the relevant safe working methods and movements for performing rigging activities. ● Demonstrate the selection and use of rigging gears and tools, such as pulleys, chain blocks, slings, heavy lifting chains, shackles, hooks, and ropes based on the rigging requirements.
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Classroom Aids

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

Tools, Equipment and Other Requirements

Spud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, Pliers, Impact Wrench, Drilling Machine With Bits, Electric Screw Gun, Electric Hexa Saw, Measuring Tape, Plumb Bob, Spirit Level, Chalks Line, Try Square, Water Level, Tower Crane, Mobile Crane, Forklift, Scissor Lift, Hydraulic Jacks, Electric Wire Rope Hoist, Electrical Winch, Electrical Chain Hoist, Slings, Wire Ropes, Shackles, Spreader Board, Chain, Link, Eye Hook, Eye Bolts, Bull Dog Grips, Clamp, Socket, Safety Helmet, Safety Goggles, Safety Shoes, Safety Belt, Cotton Gloves, Ear Plugs, Reflective Jackets, Dust Mask, Fire Prevention Kit, Barricade Tape, Safety Tags, Scrappers, Wire Brushes, Caulking Gun, Caulking Iron, Caulking Mallet, Air Compressor, Face Shield, Overalls, Knee Pads, Safety Harness, Fire Extinguisher, First Aid Box, Safety Notice Board



Module 3: Preparation of the surface of RCC precast units or structural steel units

Mapped to CON/N0702 v3.0

Terminal Outcomes:

- Demonstrate the process of abrasive blasting on structural steel and precast RCC sections.
- Demonstrate the process of epoxy glueing in segmental RCC precast construction work.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Discuss the conditions required for safe sandblasting and the relevant safety measures. ● List different abrasives used in sandblasting and state their physical characteristics. ● Discuss the appropriate means of epoxy glue application. ● Explain the procedure and benefit of wire brushing. ● Discuss the properties of the epoxy bonding agent and the appropriate temperature required for its application. ● Explain the use of relevant PPE, such as the protective jacket, ear plugs, goggles, face mask and gloves during sandblasting. 	<ul style="list-style-type: none"> ● Demonstrate how to adjust the air compressor and sandblaster gauges to the correct or desired pressure. ● Show how to connect the compressor and blasting equipment safely. ● Show how to perform sandblasting on structural steel and precast RCC sections to clean the unwanted material on their surfaces. ● Show how to clean the joints between RCC precast components for glueing. ● Demonstrate the preparation of epoxy glue mix. ● Show how to apply glue to the concrete surface as per the specification.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Spud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, Pliers, Impact Wrench, Drilling Machine With Bits, Electric Screw Gun, Electric Hexa Saw, Measuring Tape, Plumb Bob, Spirit Level, Chalks Line, Try Square, Water Level, Tower Crane, Mobile Crane, Forklift, Scissor Lift, Hydraulic Jacks, Electric Wire Rope Hoist, Electrical Winch, Electrical Chain Hoist, Slings, Wire Ropes, Shackles, Spreader Board, Chain, Link, Eye Hook, Eye Bolts, Bull Dog Grips, Clamp, Socket, Safety Helmet, Safety Goggles, Safety Shoes, Safety Belt, Cotton Gloves, Ear Plugs, Reflective Jackets, Dust Mask, Fire Prevention Kit, Barricade Tape, Safety Tags, Scrappers, Wire Brushes, Caulking Gun,	



Caulking Iron, Caulking Mallet, Air Compressor, Face Shield, Overalls, Knee Pads, Safety Harness, Fire Extinguisher, First Aid Box, Safety Notice Board



Module 4: Laying and dismantling concrete pump line

Mapped to CON/N0703 v3.0

Terminal Outcomes:

- Explain how to shift, stack and clean pipe segments
- Demonstrate how to lay, join and dismantle concrete pump-line.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the types of clamps and hand tools required for joining and securing pipe segments. • Discuss the importance of cleaning the pipe segments before and during the concreting work. • Explain the selection and use of common lifting tools and tackles, e.g. pulley, chain block, slings, shackles, hooks, ropes, etc. • Describe the standard procedure of laying and aligning concrete pump-line. • Discuss the appropriate precautions to be taken to clean concrete from pipe segments without damaging them. • Discuss how to secure the concrete pipeline using clamps, safety chains, wire strops, anchor brackets, etc. 	<ul style="list-style-type: none"> • Demonstrate the appropriate checks to be performed to determine the usability of pipe segments. • Show to shift and stack pipe segments safely at the appropriate location. • Discuss the importance of cleaning the pipe segments before and during the concreting work. • Show how to join pipe segments using appropriate clamps, turnbuckles, and hand tools. • Demonstrate how to construct working platforms at appropriate intervals for the maintenance of the pump line. • Show how to lift pipe segments at the required heights, using the appropriate rigging tools. • Demonstrate the ramming of external pipes to check the continuity of flow of concrete during concreting. • Show how to align pipelines providing required support at the identified locations to provide stability and water tightness. • Demonstrate the use of standard bent pipes to ensure the desired flow of concrete in the pipeline. • Show how to join, cut, clean and realign pump lines according to the concreting requirements. • Demonstrate the use of appropriate tools to dismantle and lower the pump line safely.
Classroom Aids	



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

Tools, Equipment and Other Requirements

Spud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, Pliers, Impact Wrench, Drilling Machine With Bits, Electric Screw Gun, Electric Hexa Saw, Measuring Tape, Plumb Bob, Spirit Level, Chalks Line, Try Square, Water Level, Tower Crane, Mobile Crane, Forklift, Scissor Lift, Hydraulic Jacks, Electric Wire Rope Hoist, Electrical Winch, Electrical Chain Hoist, Slings, Wire Ropes, Shackles, Spreader Board, Chain, Link, Eye Hook, Eye Bolts, Bull Dog Grips, Clamp, Socket, Safety Helmet, Safety Goggles, Safety Shoes, Safety Belt, Cotton Gloves, Ear Plugs, Reflective Jackets, Dust Mask, Fire Prevention Kit, Barricade Tape, Safety Tags, Scrappers, Wire Brushes, Caulking Gun, Caulking Iron, Caulking Mallet, Air Compressor, Face Shield, Overalls, Knee Pads, Safety Harness, Fire Extinguisher, First Aid Box, Safety Notice Board



Module 5: Staging for heavy RCC work

Mapped to CON/N0704 v3.0

Terminal Outcomes:

- Demonstrate the safe handling of staging components.
- Demonstrate the process of erecting and dismantling staging.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List different components required to erect staging for heavy RCC structures, such as trestles, heavy-duty H- frames, acrowspans, base jacks, clamps etc. • List the hand tools and rigging gear commonly used for staging work, such as hammer, pulley, rope, spanner etc. • Describe the standard procedure of lifting heavy components using rigging tools and tackles. • Describe the standard procedure of shifting, storing and stacking staging materials. • Discuss the appropriate housekeeping practices to be followed to ensure health and safety at the work site. 	<ul style="list-style-type: none"> • Show how to check the staging components to ensure their satisfactory physical condition for use in staging. • Demonstrate the process of safe shifting and stacking of different staging materials, e.g. chain pulleys, ropes, hooks, and shackles required to erect staging. • Show how to check the compaction/ rigidity and level of the scaffolding's base. • Demonstrate the process of erecting vertical and bracing components at the specified intervals. • Show how to lift staging components at the required locations using the tools and tackles, such as chain hoist, pulley, hooks, etc. • Demonstrate how to install supports at the appropriate locations using suitable formwork components.
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Spud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, Pliers, Impact Wrench, Drilling Machine With Bits, Electric Screw Gun, Electric Hexa Saw, Measuring Tape, Plumb Bob, Spirit Level, Chalks Line, Try Square, Water Level, Tower Crane, Mobile Crane, Forklift, Scissor Lift, Hydraulic Jacks, Electric Wire Rope Hoist, Electrical Winch, Electrical Chain Hoist, Slings, Wire Ropes, Shackles, Spreader Board, Chain, Link, Eye Hook, Eye Bolts, Bull Dog Grips, Clamp, Socket, Safety Helmet, Safety Goggles, Safety Shoes, Safety Belt, Cotton Gloves, Ear Plugs, Reflective Jackets, Dust Mask, Fire Prevention Kit, Barricade Tape, Safety Tags, Scrappers, Wire Brushes, Caulking Gun, Caulking Iron, Caulking Mallet, Air Compressor, Face Shield, Overalls, Knee Pads, Safety Harness, Fire Extinguisher, First Aid Box, Safety Notice Board	



Module 6: In-situ RCC piling work

Mapped to CON/N0705 v3.0

Terminal Outcomes:

- Explain the appropriate preparatory activities for piling at a construction site.
- Demonstrate how to carry out piling in construction.

Duration: 15:00	Duration: 45:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the tools and accessories required for piling work, such as tripod, funnel, auger chisel, tremie pipe, etc. • Explain the importance of erecting barricades and appropriate safety signage at the piling work location. • Describe the process of cleaning sludge and muck generated from the boreholes during piling. • Explain the importance and process of safely disposing of sludge and muck generated during piling. • Describe the process of shifting and lowering the reinforcement cage into the bored hole of the pile before concreting. • Discuss the use of bentonite in piling work and its physical properties 	<ul style="list-style-type: none"> • Demonstrate the shifting and stacking of piling tools and accessories at the specific work location. • Show how to erect piling tripods and appropriate accessories at suitable positions. • Demonstrate how to establish winch, pumps and pipelines for piling operation. • Show how to apply bentonite to the earth pit for piling. • Demonstrate the maintenance of concreting tremie pipe, funnel and other accessories, e.g. cleaning and greasing. • Demonstrate the use of lifting tools and equipment in borehole piling work, such as pulley, chain block, winch machine, wire rope, etc. • Show how to operate tremie pipes during manual boring and concreting work • Show how to carry out manual earthwork using the appropriate tools.
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Spud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, Pliers, Impact Wrench, Drilling Machine With Bits, Electric Screw Gun, Electric Hexa Saw, Measuring Tape, Plumb Bob, Spirit Level, Chalks Line, Try Square, Water Level, Tower Crane, Mobile Crane, Forklift, Scissor Lift, Hydraulic Jacks, Electric Wire Rope Hoist, Electrical Winch, Electrical Chain Hoist, Slings, Wire Ropes, Shackles, Spreader Board, Chain, Link, Eye Hook, Eye Bolts, Bull Dog Grips, Clamp, Socket, Safety Helmet, Safety Goggles, Safety Shoes, Safety Belt, Cotton Gloves, Ear Plugs, Reflective Jackets, Dust	



Mask, Fire Prevention Kit, Barricade Tape, Safety Tags, Scrappers, Wire Brushes, Caulking Gun, Caulking Iron, Caulking Mallet, Air Compressor, Face Shield, Overalls, Knee Pads, Safety Harness, Fire Extinguisher, First Aid Box, Safety Notice Board



Module 7: 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 in the workplace.

Duration: 05:00	Duration: 25:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Elucidate own roles and responsibilities. ● Explain the importance of effective communication. ● Elucidate the consequence of poor teamwork on project outcomes, timelines, safety at the construction site, etc. ● Explain different modes of communication used at the workplace. ● Explain the importance of creating a healthy and cooperative work environment among the gangs of workers. ● Elucidate applicable techniques of work, properties of materials used, tools and tackles used, and safety standards that co-workers might need as per the requirement. ● Explain the importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timeliness, safety, and risks at the construction project site. ● Explain the importance and need of supporting co-workers facing problems for the smooth functioning of work. ● Discuss the fundamental concept of gender equality. ● Explain how to recognise and be sensitive to issues of disability, 	<ul style="list-style-type: none"> ● Demonstrate how to pass on work-related information/ requirements to the team members. ● Show how to report any unresolved problem to the supervisor immediately. ● Demonstrate ways to hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams. ● Demonstrate ways to work together with co-workers in a synchronized manner. ● Demonstrate effective implementation of gender-neutral practices at the workplace. ● Demonstrate ways to address discriminatory and offensive behaviour in a professional manner as per organizational policy.



<p>culture and gender.</p> <ul style="list-style-type: none">● Discuss legislation, policies, and 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 8 Work according to personal health, safety and environment protocols at construction site

Mapped to CON/N9001 v10.0

Terminal Outcomes:

- Explain the importance of following safety norms as defined by the 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.

Duration: 05:00	Duration: 25:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Describe the reporting procedures in cases of breaches or hazards for site safety, accidents, and emergencies as per guidelines. ● Explain different types of safety hazards at construction sites. ● Discuss basic ergonomic principles as per applicability. ● Describe the procedure for responding to accidents and other emergencies at the site. ● Explain the importance of handling tools, equipment, and materials as per applicable norms. ● Explain the effect of construction material on health and environments as per applicability. ● Describe various environmental protection methods as per applicability. ● 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. ● Explain how to use hazardous material in a safe and appropriate manner as per applicability. ● Explain types of fire. ● Describe the procedure of operating 	<ul style="list-style-type: none"> ● Demonstrate how to follow emergency and evacuation procedures in case of accidents, fires, or natural calamities. ● Show how to operate different types of fire extinguishers corresponding to various types of fires as per EHS guidelines. ● Demonstrate the use of appropriate Personal Protective Equipment (PPE) as per work requirements for Head Protection, Ear Protection, Fall Protection, Foot Protection, Face and Eye Protection, Hand and Body Protection, and Respiratory Protection (if required). ● Demonstrate how to check and install all safety equipment as per standard guidelines. ● Show how to collect, segregate and deposit construction waste into appropriate containers based on their toxicity or hazardous nature. ● Show how to clean and disinfect all materials, tools and supplies before and after use.

<p>different types of fire extinguishers.</p> <ul style="list-style-type: none"> ● State safety relevant to tools, tackles, and equipment as per applicability. ● List housekeeping activities relevant to the task. ● Elucidate ways of transmission of infection ● Describe different 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. 	
<p>Classroom Aids:</p>	
<p>Black/White board, marker, Projector/LED Monitor, Computer, Trade specific charts, Safety tags, Safety Notice board, registers and other teaching aids</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>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</p>	



Module 9: Employability Skills

Mapped to 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 mindset 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 10: On-the-Job Training

Mapped to Khalasi (Assistant Rigger)

Mandatory Duration: 60:00	Recommended Duration: 00:00
Location: On-Site	
Terminal Outcomes	
<ul style="list-style-type: none">● Demonstrate how to shift RCC precast/ structural steel units at construction sites.● Show how to prepare the surface of RCC precast units or structural steel units.● Demonstrate the process of laying and dismantling concrete pump-line.● Show to carry out staging for heavy RCC work.● Demonstrate the appropriate preparatory activities for in-situ RCC piling work● Show how to use and maintain the relevant tools and equipment in rigging, surface preparation, concreting, staging and piling.● Show how to work co-ordinately in a team to achieve the work objectives.● Demonstrate appropriate practices to ensure personal health and safety at construction sites	



Annexure

Trainer Requirements

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

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role “Khalasi (Assistant Rigger)”, mapped to QP: “CON/Q0701, v3.0”, the 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 as per MEPSC guidelines is 80%.

Assessor Requirements

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

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role “Khalasi (Assistant Rigger)”, mapped to QP: “CON/Q0701, v3.0”, the 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 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