Model Curriculum

Rigger Structural Erection

SECTOR: Construction
SUB-SECTOR: Real Estate and Infrastructure Construction
OCCUPATION: Rigging
REF ID: CON/Q0702, V1.0
NSQF LEVEL: 4

Skill India
कौशल भारत-कुशल भारत

Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

CONSTRUCTION SKILL DEVELOPMENT COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Rigger Structural Erection' QP No. 'CON/ Q 0702 NSQF Level 3'

Date of Issuance: January 31st, 2017

Valid up to: August 14th, 2017 / Valid up to the next review date of the Qualification Pack

Authorised Signatory
(Construction Skill Development Council of India)

N·S·D·C National Skill Development Corporation
Transforming the skill landscape

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Rigger Structural Erection

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Rigger Structural Erection", in the "Construction" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	**Rigger Structural Erection**		
Qualification Pack Name & Reference ID	CON/Q0702, v1.0		
Version No.	1.0	**Version Update Date**	14-08-2017
Pre-requisites to Training	Preferably 5th standard with 5 Years site experience in same occupation for Non-trained worker/ 2 years site experience as a certified Khalasi (Assistant Rigger) for trained worker.		
Training Outcomes	**After completing this programme, participants will be able to:** • **Provide support in heavy structural steel lifting works :-** Introduction to lifting procedure of heavy material and demonstrate use of rigging gears • **Unload, position and align structural steel assemblies:-** Introduction to method of unloading, positioning and aligning structural steel assemblies • **Erect and dismantle staging for heavy RCC/ steel structures:-** Introduction to erection method of staging used for heavy RCC work or steel structure • **Work effectively in a team to deliver desired results at a construction site**:- Introduction to team working and effective communication procedures to be followed at construction sites • **Plan and organize work to meet expected outcomes :-** Prioritizing activities and organising resources to meet desired outcome • **Work according to personal health, safety and environment protocol at construction site: -** Importance of Health & Safety aspects & safety measures to be followed while working.		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of "Rigger Structural Erection" Qualification Pack issued by "Construction Skill Development Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Introduction** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) 00:00	**Understand the concept of:** • Concept of rigging trade and functions of trade workers • Role description/ functions of the job role • Expected personal attributes from the job role • Brief description about course content, mode of learning and duration of course • Future possible progression and career development provisions on completion of the course	• Classroom Requirement • Classroom of 30 students capacity • Black/White board • Projector/LED Monitor • Computer • Trade specific charts and other teaching aids
2	**Provide support in heavy structural steel lifting works** **Theory Duration** (hh:mm) 16:00 **Practical Duration** 64:00 **Corresponding NOS Code** CON/N0706	**Theory: -** **Understand the concept of:** • Introduction to basic principles of measurement, geometry and arithmetic calculation • Method of conversion of units of linear measurements • Different types of hand tools required to carry out material lifting activity and their use • Different types of rigging tools required to lift structural steel sections or assemblies and their use • Required nature of base – level and compaction required for equipment during lifting • Technique of guiding suspended object trough tag lines to location of erection • Basic concept of working mechanism of load lifting Equipments like cranes winches, etc. • specification of lifting tools and tackles as per load lifting requirement • interpretation of gestures/ signals by signalman during load lifting work **Demonstration/ practical: -** • Demonstrate use of hand tools and rigging gears • Demonstrate use of PPEs during heavy material handling, working near lifting equipment or working at height • Explain meaning of hand gestures provided by signal man while lifting the load • Practice anchoring of structural steel components/ units by using slings, shackle, rope or lifting hooks and secure properly	**Hand tools** • Spud Wrenches. • Open-End Wrenches. • Crescent Wrenches. • Hammer • Nibbler • pliers **Power tools** • Impact Wrench • Drilling machine with bits • Electric screw gun • Electric hexa saw **Measuring tools** • Measuring tape • Plumb Bob • Spirit level • Chalks line • Try square • Water level **Equipments and Machinery** • Tower crane • Mobile crane • Forklift • Scissor lift • Hydraulic jacks • Electric Wire Rope Hoist • Electrical winch • Electrical chain hoist **Lifting accessories Belts** • Slings • Wire ropes • Shackles • Spreader board

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Use chains, binders, belts etc. to stabilize the load to tie down the structural steel assembly units to the transporting vehicle • Inspect lifting tools and tackles for their safe working conditions • Check safety of the lifting equipment and steel components from power lines or service lines • Check structural steel assemblies or components for damage like distortion, breaking of joints etc. • Prepare base for lifting equipment and load itself by cleaning the area of lifting, providing hard barricading, erecting safety signage etc. • Provide necessary level to the soil base of lifting equipment by adding extra soil in to the potholes/ pits/ depressions or cutting elevated areas manually • Assist earth compactor equipment operator during process of compaction of base • Attach load to the lifting equipment by appropriate tools and rigging gears • Control the position of suspended load under lifting operation • Unload the load from equipment safely	• Chain • Link • Eye hook • Eye bolts • Bull dog grips • Clamp • socket **Safety instruments** • Safety Helmet • Safety goggles • Safety shoes • Safety belt • Cotton gloves • Ear plugs • Reflective jackets • Dust mask • Fire Prevention kit • Barricade tape • Safety Tags
3	**Unload, position and align structural steel assemblies** **Theory Duration** (hh:mm) 20:00 **Practical Duration** (hh:mm) 96:00 **Corresponding NOS Code** CON/N0707	**Theory: -** **Understand the concept of:** • Method of torque tightening of bolts using appropriate hand tools • different kind of common measuring tools/ instruments and their respective uses • Measurement of lines and angles • Types of hand tools required to carry out structural steel erection activity and their use • Required nature of base/ platform – level and readiness required prior to erection • Technique of guiding suspended object trough tag lines to location of erection • Introduction to working mechanism of load lifting Equipments like cranes winches, etc. • Basic specification of lifting tools and tackles as per load lifting requirement • Interpretation of gestures/ signals by signalman during load lifting work • Safety measures to be taken while working near suspended heavy loads • Method of checking alignment of the erected structures	**Hand tools** • Spud Wrenches. • Open-End Wrenches. • Crescent Wrenches. • Hammer • Nibbler • pliers **Power tools** • Impact Wrench • Drilling machine with bits • Electric screw gun • Electric hexa saw **Measuring tools** • Measuring tape • Plumb Bob • Spirit level • Chalks line • Try square • Water level **Equipments and Machinery** • Tower crane • Mobile crane • Forklift

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		Demonstration/ practical: - • Explain different types of preparatory works to be completed at the erection spot • Explain safe working method to be adopted while working at erection spots in height, under wind pressure etc. • Reporting procedure to senior if inadequacy in preparatory work observed • Explain meaning of hand gestures provided by signal man while lifting the load • Pull/ push structural steel elements in to their correct positions by using appropriate hand tools such as turnbuckles, crowbars, jacks, and hand tools • Carry out bolting in structural steel elements using appropriate spanner/ tightening tools • Practice housekeeping and cleaning at workplace	• Scissor lift • Hydraulic jacks • Electric Wire Rope Hoist • Electrical winch • Electrical chain hoist **Lifting accessories** **Belts** • Slings • Wire ropes • Shackles • Spreader board • Chain • Link • Eye hook • Eye bolts • Bull dog grips • Clamp • socket **Safety instruments** • Safety Helmet • Safety goggles • Safety shoes • Safety belt • Cotton gloves • Ear plugs • Reflective jackets • Dust mask • Fire Prevention kit • Barricade tape • Safety Tags
4	**Erect and dismantle staging for heavy RCC/ steel structures** **Theory Duration** (hh:mm) 20:00 **Practical Duration** (hh:mm) 96:00 **Corresponding NOS Code** CON/N0708	**Theory: -** **Understand the concept of:** • Introduction to basic principles of measurement, geometry and arithmetic calculation • Method of conversion of units of linear measurements • Different kind of common measuring tools/ instruments and their respective uses • Different hand tools and rigging gears required to erect and dismantle staging and their use • Application of rigging tools required to lift staging components and their use • Required nature of base – level and compaction required for erection of staging	**Hand tools** • Spud Wrenches. • Open-End Wrenches. • Crescent Wrenches. • Hammer • Nibbler • pliers **Power tools** • Impact Wrench • Drilling machine with bits • Electric screw gun • Electric hexa saw **Measuring tools** • Measuring tape • Plumb Bob • Spirit level • Chalks line • Try square

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Detail of material components used for heavy staging works and their sequential erection process according to schematics • Acceptance criteria for selection of staging and supporting components • Method of providing additional supports if required and use of staging components in it • Method of checking alignment of the erected staging to measure verticality of the same and **Demonstration/ practical: -** • Check compaction of base of staging • Check physical condition of staging components • Demonstrate use of rigging gears for lifting staging components • Practice bolting of staging components • Place horizontal and vertical components of staging • Check alignment of erected staging using appropriate measuring tools • Use clamps, props etc. to provide bracing/ support to erected staging • Check tightness of staging components and rectify if any fault is observed • Dismantle staging and lower components safely • Demonstrate use of PPEs required during erection of staging or working at height/ suspended platform • Demonstrate handling process of material and hand tools while working at height • Install foot rail, mid rail, top rale working platforms/ walkways and safety net at erected staging	• Water level **Equipments and Machinery** • Tower crane • Mobile crane • Forklift • Scissor lift • Hydraulic jacks • Electric Wire Rope Hoist • Electrical winch • Electrical chain hoist **Lifting accessories Belts** • Slings • Wire ropes • Shackles • Spreader board • Chain • Link • Eye hook • Eye bolts • Bull dog grips • Clamp • socket **Safety instruments** • Safety Helmet • Safety goggles • Safety shoes • Safety belt • Cotton gloves • Ear plugs • Reflective jackets • Dust mask • Fire Prevention kit • Barricade tape • Safety Tags
5	**Work effectively in a team to deliver desired results at the workplace** **Theory Duration** (hh:mm) 06:00 **Practical Duration** (hh:mm) 18:00	**Theory: -** **Understand the concept of:** • Concept of effective verbal communication and reporting procedure to be undertaken at workplace • Concept of team working and coordination to be maintained within the team • How to respond to the instructions at workplace	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code CON/N8001	**Demonstration/ practical: -** • Communicate clearly within the team • Report senior on observing any deviation in work or unsafe condition • Explain safe working practices during lifting and erection of heavy load • Handover material and tools to appropriate co-worker during activities	
6	**Plan and organize work to meet expected outcomes** **Theory Duration** (hh:mm) 04:00 **Practical Duration(on job training)** (hh:mm) 12:00 **Corresponding NOS Code CON/N8002**	**Theory:-** **Understand the concept of:** • Method of planning activities within defined scope of work • Basic concept of productivity, sequence of working and implementation of safety and organizational norms while working • Upkeep, storing and stacking methods of tools, materials used for domain specific works • Requisition of resources, reporting for requirement of resources orally and in written to concerned authority **Demonstration/ Practical (D/P): -** The skills will be developed and practiced while carrying out following trade related activities in a predictable and familiar working condition • Selection of materials, tools or devices for defined purpose in an optimum manner • Handling electrical tools, material, fixtures and device • Prioritize all works/ activities • Planning assigned tasks as per scope • Demonstrate optimum use of resources while performing task • Adherence to stipulated timelines for completion of rigging activities/ tasks	**Hand tools** • Spud Wrenches. • Open-End Wrenches. • Crescent Wrenches. • Hammer • Nibbler • pliers **Power tools** • Impact Wrench • Drilling machine with bits • Electric screw gun • Electric hexa saw **Measuring tools** • Measuring tape • Plumb Bob • Spirit level • Chalks line • Try square • Water level **Equipments and Machinery** • Tower crane • Mobile crane • Forklift • Scissor lift • Hydraulic jacks • Electric Wire Rope Hoist • Electrical winch • Electrical chain hoist **Lifting accessories Belts** • Slings • Wire ropes • Shackles • Spreader board • Chain • Link • Eye hook

Sr. No.	Module	Key Learning Outcomes	Equipment Required
			• Eye bolts • Bull dog grips • Clamp • socket **Safety instruments** • Safety Helmet • Safety goggles • Safety shoes • Safety belt • Cotton gloves • Ear plugs • Reflective jackets • Dust mask • Fire Prevention kit • Barricade tape • Safety Tags
7	**Work according to personal health, safety and environment protocol at construction site** **Theory Duration** (hh:mm) 08:00 **Practical Duration(On job training)** (hh:mm) 32:00 **Corresponding NOS Code** CON/N9001	**Theory: -** **Understand the concept of:** • Common types of hazards involved in construction sites • Types of hazards related to **handling of heavy material components** • Safe working methods during heavy material handling as per standard norms and actions to be taken under emergency situations • Identification of unsafe act and unsafe condition and how to report the same • Basic concept of: - 1. First Aid process 2. Use of fire extinguisher 3. Safety drills and its purpose 4. Types and use of PPEs required for tasks of lifting and erection • General trade safety protocols and practices related to activities in height under wind pressure • Standard procedure of handling, storing and stacking heavy material • What is safe disposal of waste depending upon type of waste • Basic ergonomic principles to be followed while carrying out heavy material handling, bolting and erection of staging work **Demonstration/ Practical: -** • Select PPEs and use them appropriately as per working need of rigging activities	• Safety Helmet • Safety goggles • Safety shoes • Safety belt • Cotton gloves • Ear plugs • Reflective jackets • Dust mask • Fire Prevention kit • Barricade tape • Safety Tags

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Practice handling, storing, stacking and shifting of heavy material, tools and equipment • Demonstration of locations, situations/ circumstances, malpractices which can be hazardous for electrical works • Describe use of fire extinguisher and standard practice of storing & stacking firefighting equipment's/ materials at work locations • Describe disposal of waste materials as per their nature and effects on weather	
	Total Duration **400:00** **Theory Duration** **82:00** **Practical Duration** **318:00**	**Unique Equipment Required:** Classroom Requirement Classroom of 30 students capacity, Black/White board, Projector/LED Monitor, Computer, Trade specific charts and other teaching aids Hand Tools Spud Wrenches, Open-End Wrenches, Crescent Wrenches,Sledge Hammer, Nibbler, pliers, tool kit Power tools welding tools and accessories, gas cutting tools and accessories Drill machine with bits, electric screw gun, electric hexa saw Measuring Instruments Measurement Tape, Chalk line/masons line, Water level, Spirit level, Plumb bob, try square consumables Paint, nail, welding rod, acetylene and oxygen ,screw, chalk powder Equipments and machinery required Mobile crane, tower crane, electric hoist, scissor lift, forklift, hydraulic jack, derrick, Electrical winch, Electrical chain hoist Lifting accessories Slings, Wire ropes, Shackles, Spreader board, Chain, Link, Eye hook, Eye bolts, Bull dog grips, Clamp, socket Safety instruments Safety Helmet, Safety goggles , Safety shoes , Safety belt, Cotton gloves, Ear plugs , Reflective jackets, Dust mask, Fire Prevention kit, Barricade tape, Safety Tags	

Grand Total Course Duration: **400Hours, 0 Minutes**

*(This syllabus/ curriculum has been approved by **Construction Skill Development Council of India)***

Trainer Prerequisites for Job role: "Rigger Structural Erection" mapped to Qualification Pack: "CON/Q0702, v1.0"

Sr. No.	Area	Details
1	**Description**	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "CON/Q0702".
2	**Personal Attributes**	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field
3	**Minimum Educational Qualifications**	ITI/12th standard pass
4a	**Domain Certification**	Trainer/Assessor- 50% in each NOS of Qualification Pack "CON/Q0702" & 80% overall , Lead trainer/Lead Assessors- 50% in each NOS of Qualification Pack "CON/Q0702" & 90% overall
4b	**Platform Certification**	Trainer/Assessor-80% in each NOS of Qualification Pack "MEP/Q0102" or "MEP/Q0104", Lead trainer/ Lead Assessors- 90% in each NOS of Qualification Pack "MEP/Q0101" or "MEP/Q0103"and overall 90%
5	**Experience**	i. Technical Degree holder with minimum three years of Field experience and preferably two years of teaching experience or, ii. In case of a Diploma Holder five years of field experience and preferably two years of teaching experience or, iii. In case of ITI/12th pass minimum eight years of field experience and preferably two years of teaching Experience.

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role	Rigger Structural Erection
Qualification Pack	CON/Q0702
Sector Skill Council	Construction

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC
3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on assessment criteria.
5. The passing percentage for each QP will be 50%. To pass the Qualification Pack, every trainee should score a minimum of 50% individually in each NOS.
6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.
7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.
8. After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.
9. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOSs to pass the Qualification Pack within the specified timeframe set by SSC.
10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

				Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	**Total Mark**	**Out Of**	**Theory**	**Skills Practical**
CON/N0706: Provide support in heavy structural steel lifting works	PC1. Select and use appropriate rigging gears required for heavy material shifting for structural steel assemblies/ components at construction site	**100**	5	1	4
	PC2. Anchor structural steel components/ units to the right locations and hook up with the prescribed lifting equipment by using slings, shackle, rope or lifting hooks and secure properly against slipping or deflection as per instruction		10	2	8
	PC3. Tie down the structural steel assemblies units to the transporting vehicle using chains, binders, belts etc. to stabilize the load and prevent damage during transportation		5	1	4
	PC4. Remove all bracing, packing and protective edges from the units and prepare the structural steel unit for unloading by equipment as per instruction		5	1	4
	PC5. Unload steel components/ assemblies safely under supervision at the specified location		5	1	4
	PC6. check for availability of lifting gears, tools and tackles prior to start lifting works		5	1	4
	PC7. inspect lifting tools and tackles for their safe working conditions		5	1	4
	PC8. check that the lifting equipment and steel components or assembly are placed well away from any overhead power lines or service lines		5	1	4
	PC9. check for damage like distortion, breaking of joints etc. in structural steel assemblies or components and report immediately if any damage observed		5	1	4
	PC10. check work location for barricading, presence of signage and availability of required PPEs, provided as per standard practice		5	1	4
	PC11. prepare base for lifting equipment and load to be lifted as per requirement and instruction from the superior		5	1	4
	PC12. work with respective equipment operator in order to grade and prepare the base for lifting equipment and units to be lifted		5	1	4
	PC13. provide adequate level, compactness and well drainage to the prepared base		5	1	4
	PC14. attach slings, lifting belts to the right location of the load prior to lifting		5	1	4
	PC15. attach shackle, hooks to the load as per requirement		5	1	4
	PC16. check tightness and locking of shackle, hooks to ensure safety		5	1	4

	PC17. attach tag line to the load at required locations		5	1	4
	PC18. control position of suspended loads using tag line according to the signals or instructions		5	1	4
	PC19. ride on girders or other structural-steel members to position load to be erected and guide them into position		5	1	4
		Total	**100**	**20**	**80**
CON/N0707: Unload, position and align structural steel assemblies	PC1. check for completion of preparatory works and report if any inadequacy observed to superior or concerned authority	**100**	5	1	4
	PC2. Make safe approach to the location of erection		5	1	4
	PC3. interpret hand signals provided by signalman and act according to the same		10	2	8
	PC4. keep safe distance to the load when suspended and take necessary actions on instruction		5	1	4
	PC5. provide gestures to the signalman if required for exact positioning of the load		10	2	8
	PC6. maintain correct body posture when controlling the motion of suspended load by using tag line		5	1	4
	PC7. unload steel units at specified location under close supervision of senior personnel		10	2	8
	PC8. use PPEs and relevant safety measures as per standard practice of working at height		5	1	4
	PC9. push structural-steel members into final positions, using turnbuckles, crowbars, jacks, and hand tools under supervision		10	2	8
	PC10. position steel sections, assemblies or equipments to be erected at right locations within specified limit of tolerance		10	2	8
	PC11. Carry out linear measurements to check alignment of erected section or assemblies using appropriate measuring instruments as per instruction		10	2	8
	PC12. carry out bolting at the steel connections as per instruction using appropriate hand tools		10	2	8
	PC13. maintain proper housekeeping at workplace to ensure smooth movement of workers and material		5	1	4
		Total	**100**	**20**	**80**
CON/N0708: Erect and dismantle staging for heavy RCC/ steel structures	PC1. ensure base of staging is adequately levelled and compacted	**100**	5	1	4
	PC2. check staging components for their usability		10	2	8
	PC3. erect vertical and horizontal members as per schematics and schedule		10	2	8

	PC4. lift heavy staging components at height using suitable rigging tools and tackles		10	2	8
	PC5. join staging components by bolting using appropriate hand tools		10	2	8
	PC6. place structural steel sections on top of vertical members as per specification or standard practice to form support to the base of structure		10	2	8
	PC7. check alignment of staging work and ensure that is within specified tolerance limit		10	2	8
	PC8. provide support at necessary locations using appropriate components ensuring stability of the staging against the load it is designed for		10	2	8
	PC9. carry out checks, alteration, re-tightening of members as per requirement or instruction		5	1	4
	PC10. erect barricading, safety signage at specific locations as per requirement		5	1	4
	PC11. dismantle staging works safely using appropriate tools and tackles and stack the materials at specified locations as per instruction		10	2	8
	PC12. use appropriate PPEs during activity and carry out housekeeping at workplace		5	1	4
		Total	**100**	**20**	**80**
CON/N8001: Work effectively in a team to deliver desired results at the workplace	PC1. pass on work related information/ requirement clearly to the team members	**100**	10	2	8
	PC2. inform co-workers and superiors about any kind of deviations from work		5	1	4
	PC3. address the problems effectively and report if required to immediate supervisor appropriately		5	1	4
	PC4. receive instructions clearly from superiors and respond effectively on same		5	1	4
	PC5. communicate to team members/subordinates for appropriate work technique and method		5	1	4
	PC6. seek clarification and advice as per requirement and applicability		10	2	8
	PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams		30	6	24
	PC8. work together with co-workers in a synchronized manner		30	6	24
		Total	**100**	**20**	**80**
CON/N8002: Plan and organize work to meet expected outcomes	PC1. understand clearly the targets and timelines set by superiors	**100**	10	2	8
	PC2. plan activities as per schedule and sequence		10	2	8
	PC3. provide guidance to the subordinates to obtain desired outcome		10	2	8

	PC4. plan housekeeping activities prior to and post completion of work		10	2	8
	PC5. list and arrange required resources prior to commencement of work		10	2	8
	PC6. select and employ correct tools, tackles and equipment for completion of desired work		10	2	8
	PC7. complete the work with allocated resources		10	2	8
	PC8. engage allocated manpower in an appropriate manner		10	2	8
	PC9. use resources in an optimum manner to avoid any unnecessary wastage		5	1	4
	PC10. employ tools, tackles and equipment with care to avoid damage to the same		5	1	4
	PC11. organize work output, materials used, tools and tackles deployed,		5	1	4
	PC12. processes adopted to be in line with the specified standards and instructions		5	1	4
		Total	**100**	**20**	**80**
CON/N9001: Work according to personal health, safety and environment protocol at construction site	PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authorities	**100**	5	1	4
	PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities		5	1	4
	PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable		10	2	8
	PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site		5	1	4
	PC5. identify near miss , unsafe condition and unsafe act		5	1	4
	PC6. use appropriate Personal Protective Equipment (PPE) as per work requirements including: • Head Protection (Helmets) • Ear protection • Fall Protection • Foot Protection • Face and Eye Protection • Hand and Body Protection • Respiratory Protection (if required)		10	2	8
	PC7. handle all required tools, tackles , materials & equipment safely		5	1	4
	PC8. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines		5	1	4
	PC9. install and apply properly all safety equipment as instructed		15	3	12

	PC10. follow safety protocol and practices as laid down by site EHS department		15	3	12
	PC11. collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes		10	2	8
	PC12. apply ergonomic principles wherever required		10	2	8
		Total	**100**	**20**	**80**