Model Curriculum

1. Chargehand-Precast Erection

SECTOR: Construction
SUB-SECTOR: Real Estate and Infrastructure Construction
OCCUPATION: RIGGING
REF ID: CON/Q0705, V1.0
NSQF LEVEL: 4

Skill India

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: 'Chargehand Precast Erection' QP No. 'CON/ Q 0706 NSQF Level 4'

Date of Issuance: June 30th, 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)

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Chargehand – Precast Erection

CURRICULUM / SYLLABUS

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

Program Name	**Chargehand – Precast Erection**		
Qualification Pack Name & Reference ID. ID	CON/Q0706, v1.0		
Version No.	1.0	**Version Update Date**	14-08-2017
Pre-requisites to Training	Preferably 10th standard with 9 Years site experience in same occupation for Non trained worker/ 3 years site experience as a certified Rigger Precast Erection for trained worker.		
Training Outcomes	**After completing this programme, participants will be able to:** • **Supervise lifting of heavy RCC Precast components at construction sites:-** supervise lifting operations and tandem lifting • **Erect and align RCC Precast components at construction sites:-** check preparatory work before erection and erection of structural assemblies • **Supervise and ensure grouting and caulking activities are as per specification:-**preparation of grouting and caulking agent and applying the same. • **Work effectively in a team to deliver desired results at the workplace –** 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:- :-** organizational safety norms and adopt healthy and safe work practices and housekeeping		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of "Chargehand- precast 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) 8:00 **Practical Duration** (hh:mm) 00:00	• Overview of construction sector and its importance in economy. • Lifting and erction work and job roles involved in rigging occupation • Job opportunities for Chargehand-structural erection in construction sector • Training session and training delivery plan • Roles and responsibilities of Chargehand –structural erection	Classroom Requirement 1. Classroom of 30 students capacity 2. Black/White board 3. Projector/LED Monitor 4. Computer 5. Trade specific charts and other teaching aids
2	**Supervise lifting of heavy RCC Precast components at construction sites** **Theory Duration** (hh:mm) 52:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 126:00 **Corresponding NOS Code** CON/N0715	**Theory: -** • Standard Procedure of rigging work • Units of measurement and its conversion from one system to another. • Principles of Measurement, Arithmetical calculations and geometry • Hand tools used in lifting of materials for erction work • Tools and Equipments used in rigging work and their application. • Requirement of earth base for erction equipment • Types of lifting Equipments like cranes, winches and their working mechanism • Specifications of lifting tools and tackles • Use of hand signals in erction work • Techniques of guiding suspended materials by tagline. **Demonstration/ practical: -** • Check and ensure the obstacle free route for erection area • Check and ensure the safe working mechanism of lifting Equipments and rigging gears like slings and shackles • Ensure proper illumination in area of erction. • Monitor angle between slings under tension and tightness of locks at attached point • supervise controlling the movement of suspended loads using tag line or guy rope • Use appropriate signals during lifting operations as per standard hand signaling guidelines • Assess position of cranes and loads for conducting tandem lifting operations • List out sequence of activities related to tandem lifting operations	**Hand tools** 1. Spud Wrenches. 2. Open-End Wrenches. 3. Crescent Wrenches. 4. Hammer 5. Nibbler 6. pliers **Power tools** 7. Impact Wrench 8. Drilling machine with bits 9. Electric screw gun 10. Electric hexa saw **Measuring tools** 11. Measuring tape 12. Plumb Bob 13. Spirit level 14. Chalks line 15. Try square 16. Water level **Equipments and Machinery** 17. Tower crane 18. Mobile crane 19. Forklift 20. Scissor lift 21. Hydraulic jacks 22. Electric Wire Rope Hoist 23. Electrical winch 24. Electrical chain hoist **Lifting accessories** **Belts** 25. Slings 26. Wire ropes 27. Shackles 28. Spreader board 29. Chain 30. Link 31. Eye hook

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Execute heavy tandem lifting work as per specified in applicable work methodology	32. Eye bolts 33. Bull dog grips 34. Clamp 35. socket **Safety instruments** 36. Safety Helmet 37. Safety goggles 38. Safety shoes 39. Safety belt 40. Cotton gloves 41. Ear plugs 42. Reflective jackets 43. Dust mask 44. Fire Prevention kit 45. Barricade tape Safety Tags
3	**Erect and align RCC Precast components at construction sites** **Theory Duration** (hh:mm) 48:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 120:00 **Corresponding NOS Code** CON/N0716	**Theory:** • basic sketches / schematic working drawing relevant to rigging works • lifting plans and schedules • Applicable tolerance to respective erection job • sequence of erection works as per proposed work method statement • checks to be carried out to ensure readiness of base of erections • procedure of checking alignment of erected elements using measuring tools and instruments • procedure to fill up check lists, permits applicable to erection operations **Demonstration/ practical: -** • Check for survey marks and reference points and • carry out necessary measurement to ascertain exact location of erection • check for shims, bearing pads at appropriate locations • check for provisions for bolting, welding, post-tensioning connections are available as per drawing • Carryout fixing of suspended precast units to the exact location by hand or suitable means during lowering of load • Carry out measurement and checks using measuring tools and instruments for proper alignment of erected precast units • Carryout tightening of bolted connections to the specified tolerance	**Hand tools** 1. Spud Wrenches. 2. Open-End Wrenches. 3. Crescent Wrenches. 4. Hammer 5. Nibbler 6. pliers **Power tools** 7. Impact Wrench 8. Drilling machine with bits 9. Electric screw gun 10. Electric hexa saw **Measuring tools** 11. Measuring tape 12. Plumb Bob 13. Spirit level 14. Chalks line 15. Try square 16. Water level **Equipments and Machinery** 17. Tower crane 18. Mobile crane 19. Forklift 20. Scissor lift 21. Hydraulic jacks 22. Electric Wire Rope Hoist 23. Electrical winch 24. Electrical chain hoist **Lifting accessories** **Belts** 25. Slings 26. Wire ropes

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		and torque using appropriate torque wrench wherever required	27. Shackles 28. Spreader board 29. Chain 30. Link 31. Eye hook 32. Eye bolts 33. Bull dog grips 34. Clamp 35. socket **Safety instruments** 36. Safety Helmet 37. Safety goggles 38. Safety shoes 39. Safety belt 40. Cotton gloves 41. Ear plugs 42. Reflective jackets 43. Dust mask 44. Fire Prevention kit 45. Barricade tape Safety Tags
4	**Supervise and ensure grouting and caulking activities are as per specification** **Theory Duration** (hh:mm) 48:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 120:00 **Corresponding NOS Code** CON/N0716	**Theory:** • sequence of erection works as per work method statement • specification related with grouting and caulking operations • Materials used for grouting and caulking works and their physical properties • Method of preparing mix for grouting and caulking work as per specification • correct technique of application of solution during grouting and caulking works • use of hand and power tools during grouting and caulking operations **Demonstration/ practical (D/P): -** • Ensure cleaning of RCC precast unit surfaces prior to application of bonding agents • Supervise installation of temporary arrangements surrounding to the locations to be grouted • Calculate tentative material requirement for grouting works • Supervise execution of grouting operations as per specification • Take corrective actions in case of faulty grouting works as per instruction of concerned authority • Ensure proportions of materials used to form grout is as per specification	**Hand tools** Spud Wrenches. Open-End Wrenches. Crescent Wrenches. Hammer Nibbler pliers **Power tools** 1. Impact Wrench 2. Drilling machine with bits 3. Electric screw gun 4. Electric hexa saw **Measuring tools** 5. Measuring tape 6. Plumb Bob 7. Spirit level 8. Chalks line 9. Try square 10. Water level **Equipments and Machinery** 11. Tower crane 12. Mobile crane 13. Forklift 14. Scissor lift 15. Hydraulic jacks 16. Electric Wire Rope Hoist

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Supervise preparation of caulking and sealant as per specification, prior to their application • Supervise application of primer on RCC precast joints as per specification • Apply caulking agents to complex locations precisely using appropriate hand tools	17. Electrical winch 18. Electrical chain hoist **Lifting accessories Belts** 19. Slings 20. Wire ropes 21. Shackles 22. Spreader board 23. Chain 24. Link 25. Eye hook 26. Eye bolts 27. Bull dog grips 28. Clamp 29. socket **Safety instruments** 30. Safety Helmet 31. Safety goggles 32. Safety shoes 33. Safety belt 34. Cotton gloves 35. Ear plugs 36. Reflective jackets 37. Dust mask 38. Fire Prevention kit 39. Barricade tape Safety Tags
5	**Work effectively in a team to deliver desired results at the workplace** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 18:00 **Corresponding NOS Code** CON/N8002	**Theory: -** • Different types of communication and its usage • Importance of effective communication and establishing strong working relationships with co-workers • Concept of team working and its importance • Risks of a failure in teamwork in terms of effects on project outcomes, • Importance and need of supporting co-workers facing problems for smooth functioning of work timelines, safety at the construction site **Demonstration/ Practical (D/P) :-** • Demonstrate different types of communication • Demonstrate communication to team members/subordinates for appropriate work technique • Demonstrate passing work related information clearly to team members • Demonstrate Reporting to senior for Deviation from work	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Demonstrate handing over procedure of tools ,tackles to interfacing team	
6.	**Plan and organize work to meet expected outcomes** **Theory Duration** (hh:mm) 8:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 18:00 **Corresponding NOS Code** **CON/N8002**	**Theory: -** • Plan activities of rigging work as per schedule and sequence. • Method of estimation for necessary resources and setting timelines for each activity of Rigging work • Method of preparation of details of material consumption • Basic concept of productivity, sequence of working and implementation of safety and organizational norms while working • Procedures of written/ verbal reporting • storing and stacking methods of tools, materials used for rigging work • Requisition of resources, reporting for requirement of resources orally and in written. **Demonstration/ Practical (D/P) :-** • List and arrange required resources before commencement of precast erection work. • Selection of materials, tools or tackles for defined purpose in an optimum manner for heavy erection work • Demonstrate planning and sequencing of erection work • Demonstrate allocation of manpower for each activity of precast erection work • Demonstrate Adherence to stipulated timelines for completion of erction of Precast assemblies	
7	**Work according to personal health, safety and environment protocol at construction site** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) (Recommend that this practical is done in industry set up) 18:00 **Corresponding NOS Code** CON/N9001	**Theory: -** • Safety hazards at constructions sites and in rigging work • Reporting procedures in case of hazards and accidents • Emergency response system and evacuation procedures • Safe working practices in case of rigging work as per EHS guidelines • Personal protective Equipments in rigging work • Basic ergonomic principles • Safe Disposal of waste ,harmful and hazardous materials • Safety awareness programs like tool box talks, mock drills • Handling of construction materials, tools and tackles	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Statutory compliance requirement related to working at height • Demonstration/ Practical: - • Identify hazards,risks,safety violations at construction sites and in rigging work • Demonstrate emergency and evacuation response procedures • Demonstrate safe work practices while performing rigging operation • Use appropriate PPEs while performing rigging operations • Demonstrate safe disposal of wastes at construction site • Demonstrate handling of required tools, materials and Equipments involved in rigging work • Perform housekeeping practices during and after completion of erction work	
	Total Duration **Theory Duration 180:00** **Practical Duration 420:00**	**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,chalkpowder 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: **600Hours, 0 Minutes**
Recommended 378:00 hours of OJT
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*(This syllabus/ curriculum has been approved by **Construction Skill Development Council of India)***

Trainer Prerequisites for Job role: "Chargehand – Precast Erection" mapped to Qualification Pack: "CON/Q0706, 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/Q0706".
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
4a	**Domain Certification**	Trainer/Assessor-80% in each NOS of Qualification Pack "MEP/Q0102" or "MEP/Q0104" and Lead trainer/Lead Assessors- 90% in each NOS of Qualification Pack "MEP/Q0101" or "MEP/Q0103"
4b	**Platform Certification**	Trainer/Assessor-50% in each NOS of Qualification Pack "MEP/Q0101" or "MEP/Q0103"& 80% overall, Lead trainer/ Lead Assessors- 50% 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	Chargehand - Precast Erection
Qualification Pack	CON/Q0706
Sector Skill Council	Construction Skill Development Council Of India

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 center based on assessment criteria.
5. The passing percentage for each QP will be 70%. To pass the Qualification Pack, every trainee should score a minimum of 70% 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 NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's 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/N0718: Supervise lifting of heavy RCC Precast components at construction sites	PC1. check and ensure the lifting route is free from obstacles such as live overhead electrical cables, service lines, close vicinity to existing structures or persons	**100**	3	1	2
	PC2. ensure area of operation (lifting, unloading) is safely marked, barricaded and safe access path is available to the lifting point		3	1	2
	PC3. ensure that the lifting area is adequately illuminated and clear visibility can be maintained from lifting point to erection location		3	1	2
	PC4. ensure loads to be lifted are placed appropriately at the point of lifting		3	1	2
	PC5. confirm that the lifting equipments under operation and its accessories are in safe working condition		3	1	2
	PC6. check and ensure safe working conditions of lifting gears like shackles, pulleys, hooks, ropes, slings etc. prior to start lifting work		2	0.5	1
	PC7. check for adequate tightness of slings, belts or ropes anchored to the load as per applicable standard procedure, prior to lifting		3	1	2
	PC8. monitor lifting operation considering size and shape of the loads being lifted		3	1	2
	PC9. use appropriate lifting gear considering weight, shape and size of the load		3	1	2
	PC10. closely monitor angle between slings under tension and tightness of locks at attached points to ensure stability of the suspended load		3	1	2
	PC11. ensure elements or assemblies do not get damaged during lifting operations		3	1	2
	PC12. supervise controlling the movement of suspended loads using tag line or guy rope		3	1	2
	PC13. maintain clear line of vision with the equipment operator		3	1	2
	PC14. provide appropriate signals during various stages at lifting as per standard hand signaling guidelines		3	1	2
	PC15. seek assistance for signaling if load or operator is not visible from own location		3	1	2
	PC16. report to superior promptly and clearly in case of unsafe conditions, safety violations		3	1	2
	PC17. brief subordinate workmen about lifting plan and safe working methods prior to commencing heavy lifting operations		3	1	2

	PC18. ensure safe distance of equipments and objects as per agreed work plan from human and other near objects while carrying out lifting activity		2	0.5	1
	PC19. assess position of cranes and loads in order to keep accordance with load lifting plan, safety norms provided for conducting tandem lifting operations		3	1	2
	PC20. confirm full functional tests have been carried out of all power, transmission, control and safety systems of the equipments by competent personnel prior to the commencement of the lift		3	1	2
	PC21. confirm that the weather condition is favorable to heavy lifting activities		3	1	2
	PC22. prioritize and sequence activities related to tandem lifting operations		7	2	5
	PC23. monitor and control speed of lifting when multiple lifting equipments are engaged simultaneously		7	2	5
	PC24. keep close coordination with equipment operators and maintain synchronization throughout lifting activity		7	2	5
	PC25. maintain stable position of objects under suspension (while being lifted) as per standard practice by providing signals to the equipment operators		3	1	2
	PC26. guide objects to the desired locations and ensure their safe lowering to the specified positions		3	1	2
	PC27. execute task as per considerations, assumptions, limit of tolerance specified in applicable work methodology and safety control measures during heavy lifting work, report concerned personnel if otherwise		7	2	5
		Total	**100**	**30**	**70**
CON/N0719: Erect and align RCC Precast components at construction sites	PC1. check for proper access is available to the location of erection	**100**	7	2	5
	PC2. check for survey marks and reference points and carry out necessary measurement to ascertain exact location of erection				
	PC3. check for shims, bearing pads at appropriate locations				
	PC4. check for provisions for bolting, welding, post-tensioning connections are available as per drawing				
	PC5. ensure designed area of bearing in the platform or support is available for efficient erection of the components		7	2	5
	PC6. check the area of erection for desired accessibility of load lifting equipments, otherwise report to concerned authority				
	PC7. check for hazardous situations at erection site, such as presence of live electrical cables, absence of				

	proper barricading, excessive wind speed and report it to the concerned authority promptly as per requirement				
	PC8. check availability of all materials and support equipment (identified by the seniors and required to proceed with the work) and report any shortages		3	1	2
	PC9. install shoring, bracing and guying materials as directed by the foreman/ supervisor or specified by erection drawings and details considering local conditions		3	1	2
	PC10. install erection hardware to the units, using appropriate hand tools as per instruction and specification of erection drawing		7	2	5
	PC11. pull, push and hold suspended precast units approximately to the exact location by hand or suitable means during lowering of load		7	2	5
	PC12. communicate efficiently to the signalman or operator for precise movements required to place the object at accurate location		7	2	5
	PC13. supervise and monitor activities by subordinates in order to guide the units to their location		3	1	2
	PC14. place the object to its accurate location efficiently and make required adjustments as per erection requirement		7	2	5
	PC15. ensure proper alignment of the erected precast units by carrying out required measurement and checks using appropriate measuring tools and instruments		3	1	2
	PC16. confirm orientation of the erected precast units as per instruction or drawings		3	1	2
	PC17. ensure installation of temporary connections using appropriate tools prior to final positioning of precast units		7	2	5
	PC18. tighten bolted connections to the specified tolerance and torque using appropriate torque wrench wherever required		3	1	2
	PC19. check bolt tightness in case of units having slotted connections		7	2	5
	PC20. install special steel washers to ensure that the specified tension has been developed in the bolt		3	1	2
	PC21. check location of shims, bearing pads for their proper positioning		3	1	2
	PC22. install expansion bolts using prescribed installation procedures and quality control specifications		3	1	2
	PC23. check temporary supports and connections to ensure stabilization of units in its position until final connections are made		7	2	5

	PC24. report to superior for completion or difficulties faced promptly and efficiently		3	1	2
	PC25. report to concerned authority promptly in case of any safety violation		3	1	2
	PC26. supervise observation of applicable safety practices by subordinates at workplace		3	1	2
		Total	**100**	**30**	**70**
CON/N0720: Supervise and ensure grouting and caulking activities are as per specification	PC1. ensure cleaning of RCC precast unit surfaces prior to application of bonding agents	**100**	3	1	2
	PC2. supervise installation of temporary arrangements surrounding to the locations to be grouted		7	2	5
	PC3. calculate tentative material requirement for grouting works and report to concerned authority		7	2	5
	PC4. ensure necessary materials and tools are present in order to carry out grouting operations		7	2	5
	PC5. ensure proportions of materials used to form grout is as per specification		7	2	5
	PC6. supervise execution of grouting operations as per specification and ensure grouts are being applied within stipulated time according to manufacturer's specification		7	2	5
	PC7. monitor use of grouting agents and control wastage of the same during work		7	2	5
	PC8. take corrective actions in case of faulty grouting works as per instruction of concerned authority		7	2	5
	PC9. ensure use of safety signage and PPEs by subordinates during activities		7	2	5
	PC10. ensure cleaning and preparation of surfaces of precast units for dirt and other foreign matters using appropriate tools		7	2	5
	PC11. supervise preparation of caulking and sealant as per specification, prior to their application		7	2	5
	PC12. place and ensure proper positioning of sealing		7	2	5
	PC13. supervise application of primer on RCC precast joints as per specification		7	2	5
	PC14. apply caulking agents to complex locations precisely using appropriate hand tools		7	2	5
	PC15. check completed works for conformance with specification and proposed work method and take remedial actions if any discrepancy observed a per instruction		7	2	5
		Total	**100**	**30**	**70**
CON/N8001: Work effectively in a team to deliver desired	PC1. pass on work related information/ requirement clearly to the team members	**100**	7	2	5
	PC2. inform co-workers and superiors about any kind of deviations from work		7	2	5

results at the workplace	PC3. address the problems effectively and report if required to immediate supervisor appropriately		10	3	7
	PC4. receive instructions clearly from superiors and respond effectively on same		7	2	5
	PC5. communicate to team members/subordinates for appropriate work technique and method		10	3	7
	PC6. seek clarification and advice as per requirement and applicability		7	2	5
	PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams		27	8	19
	PC8. work together with co-workers in a synchronized manner		27	8	19
		Total	**100**	**30**	**70**
CON/N8002: Plan and organize work to meet expected outcomes	PC1. understand clearly the targets and timelines set by superiors	**100**	7	2	5
	PC2. plan activities as per schedule and sequence		7	2	5
	PC3. provide guidance to the subordinates to obtain desired outcome		10	3	7
	PC4. plan housekeeping activities prior to and post completion of work		7	2	5
	PC5. list and arrange required resources prior to commencement of work		10	3	7
	PC6. select and employ correct tools, tackles and equipment for completion of desired work		10	3	7
	PC7. complete the work with allocated resources		10	3	7
	PC8. engage allocated manpower in an appropriate manner		10	3	7
	PC9. use resources in an optimum manner to avoid any unnecessary wastage		10	3	7
	PC10. employ tools, tackles and equipment with care to avoid damage to the same		7	2	5
	PC11. organize work output, materials used, tools and tackles deployed,		7	2	5
	PC12. processes adopted to be in line with the specified standards and instructions		7	2	5
		Total	**100**	**30**	**70**
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 authority	**100**	7	2	5
	PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities		7	2	5
	PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable		10	3	7
	PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site		7	2	5

	PC5. identify near miss , unsafe condition and unsafe act		7	2	5
	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	3	7
	PC7. handle all required tools, tackles , materials & equipment safely		7	2	5
	PC8. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines		7	2	5
	PC9. install and apply properly all safety equipment as instructed		13	4	9
	PC10. follow safety protocol and practices as laid down by site EHS department		13	4	9
	PC11. collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes		7	2	5
	PC12. apply ergonomic principles wherever required		7	2	5
		Total	**100**	**30**	**70**