



Qualification Pack



Foreman - Concrete

QP Code: CON/Q0110

Version: 2.0

NSQF Level: 5

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CON/Q0110: Foreman - Concrete

Brief Job Description

The job role is responsible for reading and interpreting drawings, standards and specifications, ensuring completion of preparatory work prior to concreting and directing and monitoring the execution of concreting works. The job holder also plans, arranges and manages resources and work efficiently in a team ensuring safe practices are adhered to by the team members

Personal Attributes

The Foreman - Concrete is expected to be physically fit to work across various locations with varied environmental conditions. The person should be organized, diligent, methodical, safety-conscious, and a prompt decision-maker. In addition to being a team player, the individual should have good communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- [CON/N0129: Interpret working drawings, specification and standards for concreting works](#)
- [CON/N0130: Ensure completion of preparatory works prior to concreting](#)
- [CON/N0131: Direct and monitor the execution of concreting works as per specifications and standard practices](#)
- [CON/N7001: Plan, arrange and manage resources for execution of relevant work](#)
- [CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
- [CON/N8003: Supervise, monitor and evaluate performance of subordinates at workplace](#)
- [CON/N9002: Manage workplace for safe and healthy work environment](#)

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Masonry
Country	India



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NSQF Level	5
Credits	NA
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3112.9900
Minimum Educational Qualification & Experience	10th Class + I.T.I (2 years) with 2 Years of experience in same occupation OR 12th Class with 4 Years of experience in same occupation OR Certificate-NSQF (level 4) with 2 Years of experience in same occupation
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NIL
Minimum Job Entry Age	18 Years
Last Reviewed On	31/03/2022
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
Version	2.0
Reference code on NQR	2022/CON/CSDCI/05603
NQR Version	1.0



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CON/N0129: Interpret working drawings, specification and standards for concreting works

Description

This unit describes the skills and knowledge required to read and interpret working drawings, specification and standards for concreting works

Scope

The scope covers the following :

- Interpret working drawings, specification and standards for concreting works

Elements and Performance Criteria

Interpret working drawings, specification and standards for concreting works

To be competent, the user/individual on the job must be able to:

- PC1.** interpret details like location, concrete grade, pour area, pouring volume and reinforcement detail from relevant working drawings for concreting works
- PC2.** interpret specification provided in the relevant drawing for concreting works
- PC3.** interpret schedule for concreting works
- PC4.** interpret the operational standards /manufacturer's specification of all relevant concreting tools and equipment
- PC5.** interpret the method statement for concreting works
- PC6.** interpret standard technical specification within scope of work
- PC7.** reproduce technical drawings as simplified hand sketches for explaining and providing clear instructions to subordinates
- PC8.** carry out calculation for required quantity of material from structural drawing for reconciliation and records

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for concreting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears and equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** principles involved in reading and interpreting various relevant drawings
- KU7.** how to read general arrangement drawing



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- KU8.** simplified sketch preparation from the drawing
- KU9.** how to read plan, elevation and sectional drawing
- KU10.** manufacturer's specification/ instructions for various concreting tools and equipment
- KU11.** components, materials and tools used in concreting
- KU12.** terminology used in concreting
- KU13.** basic computer literacy
- KU14.** method statement for concrete works
- KU15.** calculation for required quantity of material from structural drawing
- KU16.** all aspects of concreting work (including pouring, screening, leveling and finishing)
- KU17.** methodology of concreting works
- KU18.** different mix proportions for concrete
- KU19.** knowledge of cover to reinforcement with respect to size of reinforcement
- KU20.** knowledge of construction and expansion joints

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read sketches, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interpret working drawings, specification and standards for concreting works</i>	40	60	-	-
PC1. interpret details like location, concrete grade, pour area, pouring volume and reinforcement detail from relevant working drawings for concreting works	-	-	-	-
PC2. interpret specification provided in the relevant drawing for concreting works	-	-	-	-
PC3. interpret schedule for concreting works	-	-	-	-
PC4. interpret the operational standards /manufacturer's specification of all relevant concreting tools and equipment	-	-	-	-
PC5. interpret the method statement for concreting works	-	-	-	-
PC6. interpret standard technical specification within scope of work	-	-	-	-
PC7. reproduce technical drawings as simplified hand sketches for explaining and providing clear instructions to subordinates	-	-	-	-
PC8. carry out calculation for required quantity of material from structural drawing for reconciliation and records	-	-	-	-
NOS Total	40	60	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0129
NOS Name	Interpret working drawings, specification and standards for concreting works
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Masonry
NSQF Level	5
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022



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CON/N0130: Ensure completion of preparatory works prior to concreting

Description

This unit describes the skills and knowledge required to check and ensure the completion of preparatory works prior to concreting

Scope

The scope covers the following :

- Ensure completion of preparatory works prior to concreting at construction site/yard

Elements and Performance Criteria

Ensure completion of preparatory works prior to concreting at construction site/yard

To be competent, the user/individual on the job must be able to:

- PC1.** prepare a detailed work plan for execution of concreting work at construction site/yard
- PC2.** ensure setting out for concreting work is as per the approved drawings
- PC3.** ensure working platforms, hand rails and access stairs are safe for working
- PC4.** ensure workplace is clear of debris and guard rails, safety nets and kerb boards are in place
- PC5.** ensure that the concrete mix is prepared in the specified proportions, within the specified workability, in case of manual mixing of concrete
- PC6.** check the grade of concrete prior to concreting
- PC7.** inspect the required formwork/molds for gaps/misalignment of reinforcement/cover
- PC8.** check the formwork/molds for leaks during concreting
- PC9.** ensure cleaning of formwork prior to concreting
- PC10.** inspect the shoring and bracing of concrete forms to ensure their stability during pour
- PC11.** indicate route and position for pouring of concrete
- PC12.** inspect the fixing and setting of pump line and machinery for pouring of concrete
- PC13.** ensure the use of suitable type of pump as per the discharge and head of concrete
- PC14.** record details of the concreting works covering grade of concrete, area and volume of pour, number of workers, tools and equipment deployed for work and achieved productivity
- PC15.** oversee and inspect the pumping of concrete

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for concreting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears and equipment in accordance with organizational norms



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- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** structural drawings relevant to concreting works
- KU7.** basic principles of measurement along with simple geometry
- KU8.** methodology for estimation of required resource and material
- KU9.** standard tolerance levels for concreting work
- KU10.** difference and comparison between pre-cast and in-situ concreting works
- KU11.** appropriate proportions for the mixing of concrete to ensure consistency
- KU12.** appropriate techniques (including use of tools, equipment and material) for all aspects of concreting work (including pouring, screening, leveling and finishing)
- KU13.** methodology for checking line ,level and alignment for various concreting works
- KU14.** methodology of concreting works
- KU15.** different mix proportions for concrete
- KU16.** knowledge of cover to reinforcement with respect to size of reinforcement
- KU17.** knowledge of different type of vibrators, their influence area and use
- KU18.** knowledge of construction and expansion joints
- KU19.** how to inspect shoring and bracing of concrete forms
- KU20.** fixing of pump line for concrete flow
- KU21.** different type on concrete pumps with respect to head and flow of concrete
- KU22.** basic computer literacy
- KU23.** preventive and corrective action to ensure the completion of preparatory works prior to concreting
- KU24.** use of laser level

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read sketches, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure completion of preparatory works prior to concreting at construction site/yard</i>	40	60	-	-
PC1. prepare a detailed work plan for execution of concreting work at construction site/yard	-	-	-	-
PC2. ensure setting out for concreting work is as per the approved drawings	-	-	-	-
PC3. ensure working platforms, hand rails and access stairs are safe for working	-	-	-	-
PC4. ensure workplace is clear of debris and guard rails, safety nets and kerb boards are in place	-	-	-	-
PC5. ensure that the concrete mix is prepared in the specified proportions, within the specified workability, in case of manual mixing of concrete	-	-	-	-
PC6. check the grade of concrete prior to concreting	-	-	-	-
PC7. inspect the required formwork/molds for gaps/misalignment of reinforcement/cover	-	-	-	-
PC8. check the formwork/molds for leaks during concreting	-	-	-	-
PC9. ensure cleaning of formwork prior to concreting	-	-	-	-
PC10. inspect the shoring and bracing of concrete forms to ensure their stability during pour	-	-	-	-
PC11. indicate route and position for pouring of concrete	-	-	-	-
PC12. inspect the fixing and setting of pump line and machinery for pouring of concrete	-	-	-	-
PC13. ensure the use of suitable type of pump as per the discharge and head of concrete	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. record details of the concreting works covering grade of concrete, area and volume of pour, number of workers ,tools and equipment deployed for work and achieved productivity	-	-	-	-
PC15. oversee and inspect the pumping of concrete	-	-	-	-
NOS Total	40	60	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0130
NOS Name	Ensure completion of preparatory works prior to concreting
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Masonry
NSQF Level	5
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022



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CON/N0131: Direct and monitor the execution of concreting works as per specifications and standard practices

Description

This unit describes the skills and knowledge required to direct and monitor the execution of concreting works as per the specifications and standard practices and perform checks and corrective actions as per requirement.

Scope

The scope covers the following :

- Ensure execution of concreting in formwork/precast molds and form finished structures
- Ensure execution of concreting in extreme hot/cold weather
- Examine concrete after stripping forms and instruct repairing of concrete as per applicability

Elements and Performance Criteria

Ensure execution of concreting in formwork/precast molds and form finished structures

To be competent, the user/individual on the job must be able to:

- PC1.** visually assess the workability and usability of concrete mix and discard detrimental concrete mix
- PC2.** prescribe method for pouring, levelling and finishing of concrete as per standard practices and specifications
- PC3.** ensure the pouring of concrete from specified height and use of correct type of vibrator for compaction
- PC4.** inspect and assist in using tools and equipment relevant to task
- PC5.** ensure that concrete is compacted to desired consistency and surface is finished to specified uniformity and smoothness/finish
- PC6.** ensure leveling of edges and corners within tolerance levels
- PC7.** direct and monitor the grooving/cutting for expansion/contraction joints
- PC8.** ensure that the appropriate technique for finishing of concrete works like broom finish, float and trowel finish etc. has been employed as per drawing
- PC9.** ensure synchronization of all above concreting activities to ensure rapid placement and compaction of concrete with respect to the setting time of concrete in case of form finished structure
- PC10.** prescribe methods and monitor curing of concrete
- PC11.** highlight errors to workers, suggest remedial action and demonstrate correct work processes as per applicability

Ensure execution of concreting in extreme hot/cold weather

To be competent, the user/individual on the job must be able to:

- PC12.** monitor wind, air, concrete temperature and humidity
- PC13.** manage schedule of concreting in accordance with the temperature change in day and night as per hot/cold weather concreting



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- PC14.** provide sunshades/windbreaks/heated enclosures as per the concreting requirement
 - PC15.** check that evaporative retarder/anti-freeze is used in hot/cold weather concreting
 - PC16.** ensure correct preventive measures are taken as per the hot/cold weather concreting
 - PC17.** ensure rapid placement and compaction of concrete as per concreting requirement
 - PC18.** monitor the placing and grooving/cutting of expansion/construction joint as per concreting requirement
 - PC19.** monitor the curing of concrete for a specified period of time in hot/cold weather concreting
Examine concrete after stripping forms and instruct repairing of concrete as per applicability
- To be competent, the user/individual on the job must be able to:
- PC20.** examine the concrete after stripping of forms for surface deformities and defects
 - PC21.** direct the removal and repair of concrete with porosity, honey comb, or segregated materials, as approved by senior/client and prescribe method for repair
 - PC22.** ensure proper curing of repaired concrete

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for concreting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears and equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** structural drawings relevant to concreting works
- KU7.** basic principles of measurement along with simple geometry
- KU8.** methodology for estimation of required resource and material
- KU9.** standard tolerance levels for concreting work
- KU10.** difference and comparison between pre-cast and in-situ concreting works
- KU11.** basic properties and mix proportions of concrete
- KU12.** appropriate proportions for the mixing of concrete to ensure consistency
- KU13.** appropriate techniques (including use of tools, equipment and material) for all aspects of concreting work (including pouring, screening, leveling and finishing)
- KU14.** methodology for checking line ,level and alignment for various concreting works
- KU15.** methodology of concreting works in horizontal, vertical and inclined surfaces
- KU16.** different type of high quality concrete finish
- KU17.** sequence of pour
- KU18.** variation of slump w.r.t rate of pour
- KU19.** different type of vibrators used(internal/external vibrators),their accessibility and influence area
- KU20.** vibration in congested areas



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- KU21.** construction joints/cold joints
- KU22.** curing technique of form finished concrete, repaired concrete and hot/cold weather concrete
- KU23.** self-compacting concrete
- KU24.** initial, final setting of concrete and their checking
- KU25.** correct positioning of the pump hose when pumping of the SCC(self-compacting concrete)
- KU26.** methodology for hot/cold weather concreting works
- KU27.** major risks associated with hot and cold weather concrete pouring
- KU28.** knowledge of wind breaks, wind velocity
- KU29.** different type and use of evaporative retarder/anti-freeze compound
- KU30.** type of defects in concrete
- KU31.** different method of repair of concrete
- KU32.** different type of concrete mixer machines
- KU33.** how to protect the concreted area from damage
- KU34.** use of laser level
- KU35.** basic computer literacy
- KU36.** preventive and corrective action to ensure that the concreting work meets the quality requirements

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read sketches, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure execution of concreting in formwork/precast molds and form finished structures</i>	16	24	-	-
PC1. visually assess the workability and usability of concrete mix and discard detrimental concrete mix	-	-	-	-
PC2. prescribe method for pouring, levelling and finishing of concrete as per standard practices and specifications	-	-	-	-
PC3. ensure the pouring of concrete from specified height and use of correct type of vibrator for compaction	-	-	-	-
PC4. inspect and assist in using tools and equipment relevant to task	-	-	-	-
PC5. ensure that concrete is compacted to desired consistency and surface is finished to specified uniformity and smoothness/finish	-	-	-	-
PC6. ensure leveling of edges and corners within tolerance levels	-	-	-	-
PC7. direct and monitor the grooving/cutting for expansion/contraction joints	-	-	-	-
PC8. ensure that the appropriate technique for finishing of concrete works like broom finish, float and trowel finish etc. has been employed as per drawing	-	-	-	-
PC9. ensure synchronization of all above concreting activities to ensure rapid placement and compaction of concrete with respect to the setting time of concrete in case of form finished structure	-	-	-	-
PC10. prescribe methods and monitor curing of concrete	-	-	-	-
PC11. highlight errors to workers, suggest remedial action and demonstrate correct work processes as per applicability	-	-	-	-
<i>Ensure execution of concreting in extreme hot/cold weather</i>	16	24	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. monitor wind, air, concrete temperature and humidity	-	-	-	-
PC13. manage schedule of concreting in accordance with the temperature change in day and night as per hot/cold weather concreting	-	-	-	-
PC14. provide sunshades/windbreaks/heated enclosures as per the concreting requirement	-	-	-	-
PC15. check that evaporative retarder/anti-freeze is used in hot/cold weather concreting	-	-	-	-
PC16. ensure correct preventive measures are taken as per the hot/cold weather concreting	-	-	-	-
PC17. ensure rapid placement and compaction of concrete as per concreting requirement	-	-	-	-
PC18. monitor the placing and grooving/cutting of expansion/construction joint as per concreting requirement	-	-	-	-
PC19. monitor the curing of concrete for a specified period of time in hot/cold weather concreting	-	-	-	-
<i>Examine concrete after stripping forms and instruct repairing of concrete as per applicability</i>	8	12	-	-
PC20. examine the concrete after stripping of forms for surface deformities and defects	-	-	-	-
PC21. direct the removal and repair of concrete with porosity, honey comb, or segregated materials, as approved by senior/client and prescribe method for repair	-	-	-	-
PC22. ensure proper curing of repaired concrete	-	-	-	-
NOS Total	40	60	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0131
NOS Name	Direct and monitor the execution of concreting works as per specifications and standard practices
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Masonry
NSQF Level	5
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022



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CON/N7001: Plan, arrange and manage resources for execution of relevant work

Description

This unit describes the knowledge and the skills required for an individual to plan and organize work in order to meet expected outcome.

Scope

The scope covers the following :

- Plan and prepare for work
- Arrange and manage manpower
- Arrange allocate and manage tools, material and equipment for completion of work, as per the plan

Elements and Performance Criteria

Plan and prepare for work

To be competent, the user/individual on the job must be able to:

- PC1.** identify the targets and timelines for the work set by superiors
- PC2.** determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task
- PC3.** plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities
- PC4.** prepare the work areas in coordination with team members
- PC5.** plan for waste collection and disposal prior to and after completion of work

Arrange and manage manpower

To be competent, the user/individual on the job must be able to:

- PC6.** determine quantum and nature of work under assigned activity
- PC7.** calculate requirement of manpower for assigned activities
- PC8.** submit manpower requirement to superiors
- PC9.** allocate and extract work as per plan
- PC10.** provide clear instructions to workmen for execution of work
- PC11.** ensure optimum utilization of manpower resources
- PC12.** record the daily labor attendance and their daily productivity

Arrange allocate and manage tools, material and equipment for completion of work, as per the plan

To be competent, the user/individual on the job must be able to:

- PC13.** estimate requirement for material, components, fixtures, equipment, tools and accessories
- PC14.** submit material, equipment and tool requirement to superiors
- PC15.** allocate material, equipment and tools to workmen and extract the work as per plan
- PC16.** provide clear instructions for optimum use of resources



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PC17. ensure the work processes adopted are in line with the specified standards and instructions

PC18. complete the work with the allocated resources within specified time

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for execution of relevant work
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears and equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** how to identify work activities that need to be planned and organized
- KU7.** how to undertake all aspect of planning and organizing the task, including interpretation of task, reading drawing/schedules, arranging resources, reporting problems etc.
- KU8.** manpower requirement on the basis of quantum of work and productivity
- KU9.** sequence and priority of activities
- KU10.** how to identify priority and critical activity of relevant task
- KU11.** method and technique on briefing team members about relevant work
- KU12.** different checks to evaluate progress and quality of relevant works
- KU13.** importance of daily productivity report
- KU14.** importance of daily attendance register
- KU15.** how to calculate quantum of relevant work
- KU16.** calculation of tools and material requirement
- KU17.** optimum use of available resources
- KU18.** computer basics

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read sketches, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates



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GS9. evaluate the complexity of the tasks

GS10. identify any violation of safety norms during the work



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan and prepare for work</i>	12	18	-	-
PC1. identify the targets and timelines for the work set by superiors	-	-	-	-
PC2. determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task	-	-	-	-
PC3. plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities	-	-	-	-
PC4. prepare the work areas in coordination with team members	-	-	-	-
PC5. plan for waste collection and disposal prior to and after completion of work	-	-	-	-
<i>Arrange and manage manpower</i>	12	18	-	-
PC6. determine quantum and nature of work under assigned activity	-	-	-	-
PC7. calculate requirement of manpower for assigned activities	-	-	-	-
PC8. submit manpower requirement to superiors	-	-	-	-
PC9. allocate and extract work as per plan	-	-	-	-
PC10. provide clear instructions to workmen for execution of work	-	-	-	-
PC11. ensure optimum utilization of manpower resources	-	-	-	-
PC12. record the daily labor attendance and their daily productivity	-	-	-	-
<i>Arrange allocate and manage tools, material and equipment for completion of work, as per the plan</i>	16	24	-	-
PC13. estimate requirement for material, components, fixtures, equipment, tools and accessories	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. submit material, equipment and tool requirement to superiors	-	-	-	-
PC15. allocate material, equipment and tools to workmen and extract the work as per plan	-	-	-	-
PC16. provide clear instructions for optimum use of resources	-	-	-	-
PC17. ensure the work processes adopted are in line with the specified standards and instructions	-	-	-	-
PC18. complete the work with the allocated resources within specified time	-	-	-	-
NOS Total	40	60	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N7001
NOS Name	Plan, arrange and manage resources for execution of relevant work
Sector	Construction
Sub-Sector	Generic, Real Estate and Infrastructure construction
Occupation	Generic
NSQF Level	5
Credits	TBD
Version	3.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022



Qualification Pack

CON/N8001: Work effectively in a team to deliver desired results at the workplace

Description

This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results

Scope

The scope covers the following :

- Interact and communicate in an effective manner
- Support co-workers to execute the project requirements
- Practice inclusion

Elements and Performance Criteria

Interact and communicate in an effective manner

To be competent, the user/individual on the job must be able to:

- PC1.** pass on work related information/ requirement clearly to the team members
- PC2.** inform co-workers and superiors about any kind of deviations from work
- PC3.** report any unresolved problem to the supervisor immediately
- PC4.** obtain instructions from superiors and respond on the same
- PC5.** communicate to team members/subordinates for appropriate work technique and method
- PC6.** seek clarification and advice as per the requirement

Support co-workers to execute the project requirements

To be competent, the user/individual on the job must be able to:

- PC7.** hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams
- PC8.** work together with co-workers in a synchronized manner

Practice inclusion

To be competent, the user/individual on the job must be able to:

- PC9.** maintain cultural inclusivity at work place
- PC10.** maintain disability friendly work practices
- PC11.** follow gender neutral practices at workplace
- PC12.** address discriminatory and offensive behaviour in a professional manner as per organizational policy

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** own roles and responsibilities



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- KU2.** importance of effective communication
- KU3.** the consequence of poor teamwork on project outcomes, timelines, safety at the construction site, etc.
- KU4.** different modes of communication used at workplace
- KU5.** importance of creating healthy and cooperative work environment among the gangs of workers
- KU6.** different activities within the work area where interaction with other workers is required
- KU7.** applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement
- KU8.** importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timeliness, safety, risks at the construction project site
- KU9.** importance and need of supporting co-workers facing problems for the smooth functioning of work
- KU10.** the fundamental concept of gender equality
- KU11.** how to recognise and be sensitive to issues of disability, culture and gender
- KU12.** legislation, policies, and procedures relating to gender sensitivity and cultural diversity including their impact on the area of operation

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read the communication regarding work completion, materials used, tools and tackles used, the resource required, etc,
- GS3.** speak in one or more languages, preferably in one of the local language of the site
- GS4.** listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes
- GS5.** communicate orally and effectively with co-workers considering their educational and social background
- GS6.** decide on what information is to be shared with co-workers within the team or to the interfacing gang of workers
- GS7.** plan work and organize the required resources in coordination with team members
- GS8.** complete all assigned task in coordination with team members
- GS9.** take initiative in resolving issues among co-workers or report the same to superiors
- GS10.** ensure best ways of coordination among team members
- GS11.** evaluate the complexity of task and determine if any guidance is required from superiors



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate in an effective manner</i>	24	36	-	-
PC1. pass on work related information/ requirement clearly to the team members	-	-	-	-
PC2. inform co-workers and superiors about any kind of deviations from work	-	-	-	-
PC3. report any unresolved problem to the supervisor immediately	-	-	-	-
PC4. obtain instructions from superiors and respond on the same	-	-	-	-
PC5. communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
PC6. seek clarification and advice as per the requirement	-	-	-	-
<i>Support co-workers to execute the project requirements</i>	8	12	-	-
PC7. hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
PC8. work together with co-workers in a synchronized manner	-	-	-	-
<i>Practice inclusion</i>	8	12	-	-
PC9. maintain cultural inclusivity at work place	-	-	-	-
PC10. maintain disability friendly work practices	-	-	-	-
PC11. follow gender neutral practices at workplace	-	-	-	-
PC12. address discriminatory and offensive behaviour in a professional manner as per organizational policy	-	-	-	-
NOS Total	40	60	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N8001
NOS Name	Work effectively in a team to deliver desired results at the workplace
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	5
Credits	TBD
Version	9.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQF Clearance Date	31/03/2022



Qualification Pack

CON/N8003: Supervise, monitor and evaluate performance of subordinates at workplace

Description

This unit covers the skills and knowledge required by an individual to supervise, monitor and evaluate performance of subordinates at the work place

Scope

The scope covers the following :

- Monitor and evaluate subordinates performance as per quality standards and timelines
- Practice and promote gender inclusive behavior and leadership

Elements and Performance Criteria

Monitor and evaluate subordinates performance as per quality standards and timelines

To be competent, the user/individual on the job must be able to:

- PC1.** fix expected targets for the respective gang as per site requirements and allocate work to subordinates
- PC2.** establish expected performance standards and expectations for the respective gang of workers to meet the desired outcomes
- PC3.** inspect assigned work to the respected gang of workers through progressive checking
- PC4.** observe and verify the work activities performed by the subordinates at the construction site
- PC5.** monitor overall performance of subordinates on the designed measures to ensure quality requirements set by the concerned authority
- PC6.** ensure adherence to the organizational policies and procedures for all relevant construction activities by the workmen subordinations

Practice and promote gender inclusive behavior and leadership

To be competent, the user/individual on the job must be able to:

- PC7.** promote a safe, supportive, inclusive and gender sensitive environment at workplace.
- PC8.** manage and facilitate capacity building to enable inclusion of all genders
- PC9.** take prompt corrective action in case of inappropriate behavior at workplace

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** policies, procedures and work targets for performance evaluation and appraisals
- KU2.** organizational policies, procedures and protocol for smooth completion of work at the respective workplace
- KU3.** complete work/task accurately by following standard specifications and procedures by optimized and correct used of materials , tools, tackles and equipment



Qualification Pack

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at one or more language, preferably the local language
- GS2.** read in at one or more language, preferably the local language at the site
- GS3.** speak in at one or more language, preferably one of the local language at the site
- GS4.** communicate effectively with team members at workplace
- GS5.** plan work as per right sequence and organize required resources in coordination with the team members
- GS6.** complete work as per the requirement
- GS7.** evaluate and find solutions to minimize errors and suggest improvements for optimizing resource utilization
- GS8.** assess which situations would require intervention of superiors



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Monitor and evaluate subordinates performance as per quality standards and timelines</i>	40	40	-	-
PC1. fix expected targets for the respective gang as per site requirements and allocate work to subordinates	-	-	-	-
PC2. establish expected performance standards and expectations for the respective gang of workers to meet the desired outcomes	-	-	-	-
PC3. inspect assigned work to the respected gang of workers through progressive checking	-	-	-	-
PC4. observe and verify the work activities performed by the subordinates at the construction site	-	-	-	-
PC5. monitor overall performance of subordinates on the designed measures to ensure quality requirements set by the concerned authority	-	-	-	-
PC6. ensure adherence to the organizational policies and procedures for all relevant construction activities by the workmen subordinations	-	-	-	-
<i>Practice and promote gender inclusive behavior and leadership</i>	10	10	-	-
PC7. promote a safe, supportive, inclusive and gender sensitive environment at workplace.	-	-	-	-
PC8. manage and facilitate capacity building to enable inclusion of all genders	-	-	-	-
PC9. take prompt corrective action in case of inappropriate behavior at workplace	-	-	-	-
NOS Total	50	50	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N8003
NOS Name	Supervise, monitor and evaluate performance of subordinates at workplace
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	6
Credits	TBD
Version	3.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022



Qualification Pack

CON/N9002: Manage workplace for safe and healthy work environment

Description

This unit describes the skill and knowledge required to maintain a healthy & safe working environment for the group of people working under an individual

Scope

The scope covers the following :

- Ensure effective implementation of health, safety and environment policies and procedures
- Identify and respond to risks / fire and emergencies associated with the work practices and workplace
- Ensure sanitization and infection control guidelines are followed at construction site

Elements and Performance Criteria

Ensure effective implementation of health, safety and environment policies and procedures

To be competent, the user/individual on the job must be able to:

- PC1.** implement safe handling and stacking methods at workplace /store
- PC2.** ensure the adequate availability and placing of safety and protection installations at site
- PC3.** ensure that safe access ways are available at work place for movement of workers and materials
- PC4.** ensure the safe use of tools and tackles by teammates as per work requirements
- PC5.** ensure ergonomic principles are adopted by the teammates while lifting and shifting of construction materials, tools and equipment
- PC6.** ensure appropriate use of following Personal Protective Equipment (PPE) as per work requirement of head protection, ear protection, fall protection, foot protection, face and eye protection, hand and body protection, respiratory protection
- PC7.** maintain entry and exit pathways from confined spaces, excavated pits and other location as per safety parameters/instructions
- PC8.** ensure proper housekeeping at workplace
- PC9.** ensure that subordinates adhere to health and safety plans

Identify and respond to risks / fire and emergencies associated with the work practices and workplace

To be competent, the user/individual on the job must be able to:

- PC10.** identify any hazard at workplace and report/notify the same to appropriate authorities.
- PC11.** follow procedures for accident recording and reporting as per organizational and statutory requirements
- PC12.** ensure effective adherence to emergency response procedures / protocols
- PC13.** select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline
- PC14.** obtain 'height pass' clearance as per EHS guideline



Qualification Pack

PC15. implement control measures to reduce risks ,meeting legislative requirements within the scope of own role and expertise, as per organizational policies

Ensure sanitization and infection control guidelines are followed at construction site

To be competent, the user/individual on the job must be able to:

PC16. promote awareness about latest hygiene and sanitation regulations

PC17. ensure disinfection procedure related to material, tools and supplies are followed properly

PC18. respond to infection prevention and control and its non-compliance , within scope of own role or report to required personnel

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the policies, procedures and protocol set up by the EHS Department with respect to Health , Safety and Environment at the respective construction site

KU2. reporting procedures in cases of breaches or hazards in site safety, accidents or emergency situations

KU3. safe working practices for tools, tackles and equipment

KU4. workplace policies and health and safety requirements for dealing with potential risks as defined by the EHS department

KU5. how to respond to accidents and emergencies

KU6. the appropriate personal protective equipment to be used based on various working conditions

KU7. how to use necessary material ,tools, tackles and equipment in a safe and appropriate manner as specified by site EHS for each level and respective workman gang

KU8. ways of transmission of infection

KU9. ways to manage infectious risks at the workplace

KU10. different methods of cleaning, disinfection, sterilization and sanitization

KU11. symptoms of infection like fever, cough, redness, swelling and inflammation

KU12. actions be taken during a medical emergency

KU13. current guidelines, national legislation, local policies and protocols regarding spread of infectious disease.

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. write in at least one language, preferably in the local language of the site

GS2. read instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site

GS3. speak in one or more language, preferably one of the local language at the site

GS4. listen and follow instructions shared by site EHS and superiors regarding site safety

GS5. communicate reporting of site conditions, hazards, accidents, etc.

GS6. analyze the safety aspect of the workplace



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GS7. identify any violation of safety norms during the work



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure effective implementation of health, safety and environment policies and procedures</i>	20	30	-	-
PC1. implement safe handling and stacking methods at workplace /store	-	-	-	-
PC2. ensure the adequate availability and placing of safety and protection installations at site	-	-	-	-
PC3. ensure that safe access ways are available at work place for movement of workers and materials	-	-	-	-
PC4. ensure the safe use of tools and tackles by teammates as per work requirements	-	-	-	-
PC5. ensure ergonomic principles are adopted by the teammates while lifting and shifting of construction materials, tools and equipment	-	-	-	-
PC6. ensure appropriate use of following Personal Protective Equipment (PPE) as per work requirement of head protection, ear protection, fall protection, foot protection, face and eye protection, hand and body protection, respiratory protection	-	-	-	-
PC7. maintain entry and exit pathways from confined spaces, excavated pits and other location as per safety parameters/instructions	-	-	-	-
PC8. ensure proper housekeeping at workplace	-	-	-	-
PC9. ensure that subordinates adhere to health and safety plans	-	-	-	-
<i>Identify and respond to risks / fire and emergencies associated with the work practices and workplace</i>	12	18	-	-
PC10. identify any hazard at workplace and report/notify the same to appropriate authorities.	-	-	-	-
PC11. follow procedures for accident recording and reporting as per organizational and statutory requirements	-	-	-	-
PC12. ensure effective adherence to emergency response procedures / protocols	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline	-	-	-	-
PC14. obtain 'height pass' clearance as per EHS guideline	-	-	-	-
PC15. implement control measures to reduce risks ,meeting legislative requirements within the scope of own role and expertise, as per organizational policies	-	-	-	-
<i>Ensure sanitization and infection control guidelines are followed at construction site</i>	8	12	-	-
PC16. promote awareness about latest hygiene and sanitation regulations	-	-	-	-
PC17. ensure disinfection procedure related to material, tools and supplies are followed properly	-	-	-	-
PC18. respond to infection prevention and control and its non-compliance , within scope of own role or report to required personnel	-	-	-	-
NOS Total	40	60	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N9002
NOS Name	Manage workplace for safe and healthy work environment
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	TBD
Version	3.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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.



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- 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.
- 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.
- 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.
- Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N0129. Interpret working drawings, specification and standards for concreting works	40	60	-	-	100	15
CON/N0130. Ensure completion of preparatory works prior to concreting	40	60	-	-	100	20
CON/N0131. Direct and monitor the execution of concreting works as per specifications and standard practices	40	60	-	-	100	20
CON/N7001. Plan, arrange and manage resources for execution of relevant work	40	60	-	-	100	15
CON/N8001. Work effectively in a team to deliver desired results at the workplace	40	60	-	-	100	5



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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N8003. Supervise, monitor and evaluate performance of subordinates at workplace	50	50	-	-	100	10
CON/N9002. Manage workplace for safe and healthy work environment	40	60	-	-	100	15
Total	290	410	-	-	700	100



Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training



Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.



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Knowledge and Understanding (KU)	<p>Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.</p>
Organisational Context	<p>Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.</p>
Electives	<p>Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.</p>
Options	<p>Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.</p>