









# Assistant Technician-Drilling (Oil & Gas)

# QP Code: HYC/Q0101

Version: 2.0

NSQF Level: 4

Hydrocarbon Sector Skill Council || OIDB Bhawan, Tower C, 2nd Floor, Plot No. 2, Vikas Marg, Sector – 73 Noida (U.P) -201301 || email:admin@hsscindia.in







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# HYC/Q0101: Assistant Technician-Drilling (Oil & Gas)

## **Brief Job Description**

The Technician-Drilling (Oil & Gas) is to carry out the drilling operation task like Rig building, Rig dismantling, Top man operation, Rig floor, operation, cementation job and other drilling activities and operate Drill floor operations to drill shallow as well as deep holes for exploring and exploiting Oil & Gas. This operation is a specialized task that can be safely perform only with adequate training and experience. The individual should have knowledge for performing basic maintainance of the machine.

#### **Personal Attributes**

This job requires the individual to have good problem solving Skills, knowledge of Hydrocarbon Sector, Drilling process and systems would be an added advantage. Additional skills including communication skills strong customer service, strong problem solving skills; should be self motivated; should be able to apply practical judgement to successfully perform the assigned responsibilities and a team player with ability to work with team and under pressure.

## Applicable National Occupational Standards (NOS)

#### **Compulsory NOS:**

- 1. <u>HYC/N0101: Perform Drilling Operation</u>
- 2. HYC/N0102: Occupational health and safety (OHAS)
- 3. HYC/N0103: Work effectively with colleagues and supervisor

## **Qualification Pack (QP) Parameters**

Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration and Production
Country	India
NSQF Level	4
Credits	NA
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8113.0100









Minimum Educational Qualification & Experience	10th Class (with minimum 2 years of relevant experience) OR 12th Class (Science) OR I.T.I (in engineering trade after class 10th) OR Diploma (3-years Diploma in relevant field )
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	Knowledge of basic machine tools handling would be an added advantage
Minimum Job Entry Age	18 Years
Last Reviewed On	27/01/2022
Next Review Date	27/01/2025
Deactivation Date	27/01/2025
NSQC Approval Date	27/01/2022
Version	2.0
Reference code on NQR	2022/HYC/HSSCI/05170
NQR Version	1.0







# HYC/N0101: Perform Drilling Operation

## Description

This unit is about performing drilling operations at Oil & Gas well site.

#### **Elements and Performance Criteria**

#### **Drilling Process**

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

- **PC1.** Undrstanding and knowledge of the types of Oil & Gas Wells Exploratory well Developmental well Geopressure/geothermal well Stripper well Multiple completion well Injection well Service well
- **PC2.** Understand Platform types for underwater drilling submersible barges and platforms Shallow water complex Gravity base Compliant towers FPSO: Floating Production, Storage and Offloading Floating platforms Jack-ups (on legs) Tension Leg Platform (TLP) Semi-submersible platforms Drilling barges Drill ships Fixed on site platforms Sub-sea templates
- PC3. Understand the on shore well components
- **PC4.** Identify Upstream process sections: Wellhead, Manifolds and gathering, Separation, Metering, storage and export and Utility systems
- **PC5.** Understanding the Components of Drilling Rig (derrick, floor, drawworks, drive and mud handling, drill string, Drill Collar, Blowout Preventer, turn table, Crown Block, Top drive, Iron Roughneck, Mud Pumps.)
- **PC6.** Understanding the following components of well i.e. Well casing Conductor casing, Surface casing, Intermediate casing, Production casing. Use of tubing and Packer and Completion (Open hole completions, Conventional perforated completions, Sand exclusion completions, Permanent completions, Multiple zone completion, Drainhole completions)
- PC7. Understanding of working at height, operation at monkey board, top man escape device
- **PC8.** Knowledge of the Wellhead Dry or subsea completion Casing head and casing hangers The tubing hanger Master gate valve Pressure gauge Wing valve Swab valve Variable flow choke valve Vertical tree Subsea wells (umbilical) Injection
- **PC9.** Perform Artificial lift operation: Rod pumps, electrical submerged pump (ESP), Gas lift and Plunger lift
- PC10. Knowledge of the Well workover, intervention and stimulation
- **PC11.** Understanding Manifolds and gathering Pipelines and risers Production, test and injection manifolds

#### **Driling Techniques**

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

- **PC12.** Understanding/knowledge of the Drilling Methods Drilling rigs Percussion or cable drilling Rotary drilling Rotary percussion drilling Electro and turbo drilling Directional drilling explosive drilling and flame piercing
- PC13. Perform Abandonment Process
- PC14. Perform drilling Operations Drilling techniques Drilling mud Casing and cementation
- PC15. Understanding Completion, Enhanced Recovery and Workover Operations
- PC16. Understand a Typical Drilling Program









#### Basic Maintenance Techniques and Practices

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

- PC17. Prepare for basic routine maintenance tasks
- PC18. Describe basic routine maintenance techniques
- PC19. Carry out basic routine maintenance tasks
- PC20. Carry out basic inspections
- PC21. Identify the use of basic maintenance hand tools
- **PC22.** Demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact
- PC23. Demonstrate the care of basic maintenance hand tools

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** organisational sop on drilling process
- KU2. risk and impact of not following defined procedures/work instructions
- **KU3.** escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures
- KU4. records to be maintained and implications of non-maintenance of the same
- KU5. she and ohs guidelines and regulations as per companys norms
- KU6. basic oil & gas drilling process and operations
- KU7. basic maintenance hand tools
- KU8. basic measuring and marking-out instruments
- **KU9.** basic engineering communications
- KU10. basic numerical skills
- KU11. physical science and basic properties of materials

## **Generic Skills (GS)**

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

- GS1. fill up appropriate technical forms, activity logs in required format of the company
- GS2. maintain proper records as per given format
- **GS3.** read and understand manuals, work orders, health and safety instructions, memos, reports etc.
- **GS4.** cautious to the customers
- **GS5.** liaisioning and coordination skills
- **GS6.** communicate with supervisor and peers
- **GS7.** communicate in the local language (preferable)
- **GS8.** plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity









- **GS9.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS10. identify immediate or temporary solutions to resolve delays
- **GS11.** identify sources of support that can be availed of for problem solving for various kind of problems
- **GS12.** seek appropriate assistance from other sources to resolve problems
- **GS13.** report problems that you cannot resolve to appropriate authority
- GS14. identify defects in the material and communicate it at the earliest and suggest
- GS15. improvements(if any) in process/material based on experience
- GS16. apply problem-solving approaches in different situations
- **GS17.** refer anomalies to the line manager sb18. identify any issues affecting the material, equipment or surroundings
- **GS18.** escalate issues that cannot be solved as per the troubleshooting/company manual







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Drilling Process	9	38	-	-
<b>PC1.</b> Undrstanding and knowledge of the types of Oil & Gas Wells Exploratory well Developmental well Geopressure/geothermal well Stripper well Multiple completion well Injection well Service well	_	5	_	-
<b>PC2.</b> Understand Platform types for underwater drilling submersible barges and platforms Shallow water complex Gravity base Compliant towers FPSO: Floating Production, Storage and Offloading Floating platforms Jack-ups (on legs) Tension Leg Platform (TLP) Semi-submersible platforms Drilling barges Drill ships Fixed on site platforms Sub-sea templates	-	5	-	-
PC3. Understand the on shore well components	-	5	-	-
<b>PC4.</b> Identify Upstream process sections: Wellhead, Manifolds and gathering, Separation, Metering, storage and export and Utility systems	1	4	_	-
<b>PC5.</b> Understanding the Components of Drilling Rig (derrick, floor, drawworks, drive and mud handling, drill string, Drill Collar, Blowout Preventer, turn table, Crown Block, Top drive, Iron Roughneck, Mud Pumps.)	1	4	_	-
<b>PC6.</b> Understanding the following components of well i.e. Well casing - Conductor casing, Surface casing, Intermediate casing, Production casing. Use of tubing and Packer and Completion (Open hole completions, Conventional perforated completions, Sand exclusion completions, Permanent completions, Multiple zone completion, Drainhole completions)	1	4	-	-
<b>PC7.</b> Understanding of working at height, operation at monkey board, top man escape device	2	4	-	-
<b>PC8.</b> Knowledge of the Wellhead Dry or subsea completion Casing head and casing hangers The tubing hanger Master gate valve Pressure gauge Wing valve Swab valve Variable flow choke valve Vertical tree Subsea wells (umbilical) Injection	1	4	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC9.</b> Perform Artificial lift operation: Rod pumps, electrical submerged pump (ESP), Gas lift and Plunger lift	1	1	-	-
<b>PC10.</b> Knowledge of the Well workover, intervention and stimulation	1	1	-	-
<b>PC11.</b> Understanding Manifolds and gathering Pipelines and risers Production, test and injection manifolds	1	1	-	-
Driling Techniques	7	14	-	-
<b>PC12.</b> Understanding/knowledge of the Drilling Methods Drilling rigs Percussion or cable drilling Rotary drilling Rotary percussion drilling Electro and turbo drilling Directional drilling explosive drilling and flame piercing	1	4	-	-
PC13. Perform Abandonment Process	1	2	-	-
<b>PC14.</b> Perform drilling Operations Drilling techniques Drilling mud Casing and cementation	1	4	-	-
<b>PC15.</b> Understanding Completion, Enhanced Recovery and Workover Operations	1	2	-	-
PC16. Understand a Typical Drilling Program	3	2	-	-
Basic Maintenance Techniques and Practices	18	14	-	-
PC17. Prepare for basic routine maintenance tasks	3	2	-	-
<b>PC18.</b> Describe basic routine maintenance techniques	2	2	-	-
PC19. Carry out basic routine maintenance tasks	4	1	-	-
PC20. Carry out basic inspections	1	2	-	-
<b>PC21.</b> Identify the use of basic maintenance hand tools	3	2	-	-
<b>PC22.</b> Demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact	3	2	-	-
<b>PC23.</b> Demonstrate the care of basic maintenance hand tools	2	3	_	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	34	66	-	-









# National Occupational Standards (NOS) Parameters

NOS Code	HYC/N0101
NOS Name	Perform Drilling Operation
Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration & Production
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









# HYC/N0102: Occupational health and safety (OHAS)

## Description

This unit is about Health and Safety in Production and Maintenance

## **Elements and Performance Criteria**

#### Health and safety

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

- **PC1.** use protective clothing/equipment for specific tasks like cutting, welding, repairing in pipeline jobs, well operations, maintenance inside the installation and work conditions during day to day work and during emergency.
- **PC2.** state the name and location of people responsible for health and safety for the workplace and escalation matrix.
- **PC3.** identify job-site hazardous work and state possible causes of risk or possible accidents in the workplace.
- **PC4.** carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role.
- **PC5.** state location of general health and safety equipment in the workplace.
- PC6. inspect for faults set up and safely use steps and ladders in general use
- PC7. work safely in and around trenches, elevated places and confined areas
- PC8. identify common risks and safety sop in oil & gas production area

#### Fire safety

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

- **PC9.** use the various appropriate fire extinguishers on different types of fires correctly.
- PC10. identify and follow pro active and reactive fire fighting sop in oil & gas production facilities
- PC11. perform fire evacuation steps
- PC12. prepare incident reports

#### Emergencies, rescue and first-aid procedures

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

- PC13. availability of first aid box & accessories
- **PC14.** demonstrate how to free a person from electrocution
- **PC15.** administer appropriate first aid to victims where required eg. in case of bleeding, burns, choking, electric shock, poisoning etc.
- PC16. administer appropriate first aid in chemical hazard
- **PC17.** perform and organize loss minimization or rescue activity during an accident in real or simulated environments
- PC18. follow sop in oil & gas production facilities
- PC19. use/propoer utilization of breathing apparatus
- **PC20.** ensure emergency preparation and resonse

## Knowledge and Understanding (KU)







The individual on the job needs to know and understand:

- **KU1.** names (and job titles if applicable), and where to find, all the people responsible for health and safety in a workplace
- KU2. names and location of documents that refer to health and safety in the workplace.
- **KU3.** risk and impact of not following defined procedures/work instructions
- **KU4.** escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures
- **KU5.** records to be maintained and implications of non-maintenance of the same
- KU6. she and ohs guidelines and regulations as per companys norms
- KU7. understanding of 5s and housekeeping
- KU8. occupational health and safety
- KU9. hazards and its effects and risk assessment
- **KU10.** safe working practices
- **KU11.** use of different types of personalprotectiveequipments(ppe)
- KU12. various types of fire fighting equipments& its uses in different conditions
- KU13. standard operating procedures in oil and gas safety w.r.t. occupational health & safety
- KU14. risk management and reporting

## **Generic Skills (GS)**

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

- **GS1.** fill up appropriate technical forms, activity logs in required format of the company
- GS2. maintain proper records as per given format
- **GS3.** read and understand manuals, work orders, health and safety instructions, memos, reports etc.
- **GS4.** cautious to the customers
- GS5. liaisioning and coordination skills
- **GS6.** communicate with supervisor and peers
- **GS7.** communicate in the local language (preferable)
- **GS8.** plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
- **GS9.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- **GS10.** identify immediate or temporary solutions to resolve delays
- **GS11.** identify sources of support that can be availed of for problem solving for various kind of problems
- **GS12.** seek appropriate assistance from other sources to resolve problems
- GS13. report problems that you cannot resolve to appropriate authority
- GS14. identify defects in the material and communicate it at the earliest and suggest
- GS15. apply problem-solving approaches in different situations







- **GS16.** refer anomalies to the line manager sb18. identify any issues affecting the material, equipment or surroundings
- **GS17.** escalate issues that cannot be solved as per the troubleshooting/company manual







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Health and safety	16	27	-	-
<b>PC1.</b> use protective clothing/equipment for specific tasks like cutting, welding, repairing in pipeline jobs, well operations, maintenance inside the installation and work conditions during day to day work and during emergency.	3	3	-	-
<b>PC2.</b> state the name and location of people responsible for health and safety for the workplace and escalation matrix.	-	5	-	-
<b>PC3.</b> identify job-site hazardous work and state possible causes of risk or possible accidents in the workplace.	3	3	-	-
<b>PC4.</b> carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role.	3	3	-	-
<b>PC5.</b> state location of general health and safety equipment in the workplace.	-	5	-	-
<b>PC6.</b> inspect for faults set up and safely use steps and ladders in general use	3	2	-	-
<b>PC7.</b> work safely in and around trenches, elevated places and confined areas	3	2	-	-
<b>PC8.</b> identify common risks and safety sop in oil & gas production area	1	4	-	-
Fire safety	11	10	-	-
<b>PC9.</b> use the various appropriate fire extinguishers on different types of fires correctly.	2	3	-	-
<b>PC10.</b> identify and follow pro active and reactive fire fighting sop in oil & gas production facilities	3	2	-	-
PC11. perform fire evacuation steps	3	3	-	-
PC12. prepare incident reports	3	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Emergencies, rescue and first-aid procedures	15	21	-	-
PC13. availability of first aid box & accessories	2	3	-	-
<b>PC14.</b> demonstrate how to free a person from electrocution	3	2	-	-
<b>PC15.</b> administer appropriate first aid to victims where required eg. in case of bleeding, burns, choking, electric shock, poisoning etc.	2	3	-	-
<b>PC16.</b> administer appropriate first aid in chemical hazard	2	3	-	-
<b>PC17.</b> perform and organize loss minimization or rescue activity during an accident in real or simulated environments	2	3	-	-
PC18. follow sop in oil & gas production facilities	2	3	-	-
<b>PC19.</b> use/propoer utilization of breathing apparatus	1	2	-	-
PC20. ensure emergency preparation and resonse	1	2	-	-
NOS Total	42	58	-	-









## **National Occupational Standards (NOS) Parameters**

NOS Code	HYC/N0102
NOS Name	Occupational health and safety (OHAS)
Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration & Production
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022







# HYC/N0103: Work effectively with colleagues and supervisor

## Description

This unit covers basic etiquette and competencies that a candidate is required to possess and demonstrate in their behavior and interactions with others at the workplace.

## **Elements and Performance Criteria**

#### Work effectively with colleagues and supervisor

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

- **PC1.** accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required
- **PC2.** accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt
- PC3. give information to others clearly, at a pace and in a manner that helps them to understand
- **PC4.** display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible
- **PC5.** consult with and assist others to maximize effectiveness and efficiency in carrying out tasks
- PC6. display appropriate communication etiquette while working
- **PC7.** display active listening skills while interacting with others at work
- **PC8.** use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism
- PC9. demonstrate responsible and disciplined behaviors at the workplace
- PC10. demonstrate time management skills
- PC11. understands expectation management
- **PC12.** demonstrate commitment to work, adhering to sops, honesty etc.

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** legislation, standards, policies, and procedures followed in the company relevant to own employment and performance conditions
- KU2. reporting structure, inter-dependent functions, lines and procedures in thework area
- KU3. risk and impact of not following defined procedures/work instructions
- **KU4.** escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures
- KU5. records to be maintained and implications of non-maintenance of the same
- KU6. she and ohs guidelines and regulations as per companys norms
- **KU7.** various categories of people that one is required to communicate and co-ordinate with in the organization
- KU8. importance of effective communication in the workplace









- KU9. importance of teamwork in organizational and individual success
- **KU10.** various components of effective communication
- KU11. key elements of active listening
- **KU12.** value and importance of active listening and assertive communication
- KU13. barriers to effective communication
- KU14. importance of tone and pitch in effective communication
- **KU15.** importance of avoiding casual expletives and unpleasant terms while communicating professional circles
- **KU16.** how poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer
- KU17. importance of ethics for professional success
- KU18. importance of discipline for professional success
- KU19. constitutes disciplined behavior for a working professional

## **Generic Skills (GS)**

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

- GS1. fill up appropriate technical forms, activity logs in required format of the company
- **GS2.** maintain proper records as per given format
- **GS3.** read and understand manuals, work orders, health and safety instructions, memos, reports etc.
- GS4. corteous to the peers , juniors , superiors and customers
- **GS5.** liaisioning and coordination skills
- GS6. make decisions on a suitable course of action or response
- **GS7.** plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
- **GS8.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- **GS9.** identify immediate or temporary solutions to resolve delays
- **GS10.** identify sources of support that can be availed of for problem solving for various kind of problems
- **GS11.** seek appropriate assistance from other sources to resolve problems
- GS12. report problems that you cannot resolve to appropriate authority
- GS13. identify defects in the material and communicate it at the earliest and suggest
- GS14. apply problem-solving approaches in different situations
- **GS15.** refer anomalies to the line manager sb18. identify any issues affecting the material, equipment or surroundings
- **GS16.** escalate issues that cannot be solved as per the troubleshooting/company manual







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Work effectively with colleagues and supervisor	22	70	-	-
<b>PC1.</b> accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	2	6	-	-
<b>PC2.</b> accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt	2	6	-	-
<b>PC3.</b> give information to others clearly, at a pace and in a manner that helps them to understand	2	6	_	-
<b>PC4.</b> display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible	-	4	_	-
<b>PC5.</b> consult with and assist others to maximize effectiveness and efficiency in carrying out tasks	2	6	-	-
<b>PC6.</b> display appropriate communication etiquette while working	2	6	-	-
<b>PC7.</b> display active listening skills while interacting with others at work	2	6	-	-
<b>PC8.</b> use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism	2	6	-	-
<b>PC9.</b> demonstrate responsible and disciplined behaviors at the workplace	2	6	-	-
PC10. demonstrate time management skills	2	6	-	-
PC11. understands expectation management	2	6	-	-
<b>PC12.</b> demonstrate commitment to work, adhering to sops, honesty etc.	2	6	-	-
NOS Total	22	70	-	-









## National Occupational Standards (NOS) Parameters

NOS Code	HYC/N0103
NOS Name	Work effectively with colleagues and supervisor
Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration & Production
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

## Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ 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 Element/ PC.

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.

7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.







#### 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
HYC/N0101.Perform Drilling Operation	34	66	-	-	100	50
HYC/N0102.Occupational health and safety (OHAS)	42	58	-	-	100	25
HYC/N0103.Work effectively with colleagues and supervisor	22	70	-	-	92	25
Total	98	194	-	-	292	100







## Acronyms

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







## 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.	









Knowledge and Understanding (KU)	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.
Organisational Context	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.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	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.
Electives	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.
Options	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.