

Qualification Pack



Assistant Technician-Production (Oil & Gas)

QP Code: HYC/Q0102

Version: 1.0

NSQF Level: 4

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HYC/Q0102: Assistant Technician-Production (Oil & Gas)

Brief Job Description

The Technician-Production (Oil & Gas) shall be primarily work as a part of field team at production installation, maintenance services, artificial lift team etc. He is to carry out operations and process maintenance of Production Plants, installation like Group Gathering Station (GGS) and Gas Collecting Station (GCS) and their wells sites and SRP. He will do field checking of all levels, pressure, temperature of heater treater, heat exchangers, water bath heaters, Oil-Gas separator, burners storage tank changeover, oil and effluent pumping stations, Gas and air compressor, Chemicals handling, cleaning of filters and strainers. He shall maintain proper records to produce timely reports. He shall follow all companys standard procedures and protocols and cooperate with the technical team and share information across the organization.

Personal Attributes

This job requires the individual to have good problem solving Skills, knowledge of Hydrocarbon Sector, Production 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. [HYC/N0102: Occupational health and safety \(OHAS\)](#)
2. [HYC/N0103: Work effectively with colleagues and supervisor](#)
3. [HYC/N0104: Perform Production activities \(On Shore and Off Shore\)](#)

Qualification Pack (QP) Parameters

Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration & Production
Country	India
NSQF Level	4

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Aligned to NCO/ISCO/ISIC Code	NCO-2015/8131.3100
Minimum Educational Qualification & Experience	10th Class with minimum 2 years of relevant experience or Class XII (Science) OR ITI in engineering trade 3-years Diploma in relevant field
Minimum Level of Education for Training in School	
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	26/01/2025
Deactivation Date	
NSQC Approval Date	27/01/2022
Version	2.0

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HYC/N0102: Occupational health and safety (OHAS)

Description

This unit is about Health and Safety in Production and Maintenance

Scope

This unit/task covers the following:

- Occupational health and safety (OHAS)
- Fire safety and emergency procedures
- Emergencies, rescue and first-aid procedures

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

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- 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
- KU15.** maintain hygiene at workplace

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)

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- 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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Health and safety</i>	16	27	-	-
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.	3	3	-	-
PC2. state the name and location of people responsible for health and safety for the workplace and escalation matrix.	-	5	-	-
PC3. identify job-site hazardous work and state possible causes of risk or possible accidents in the workplace.	3	3	-	-
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.	3	3	-	-
PC5. state location of general health and safety equipment in the workplace.	-	5	-	-
PC6. inspect for faults set up and safely use steps and ladders in general use	3	2	-	-
PC7. work safely in and around trenches, elevated places and confined areas	3	2	-	-
PC8. identify common risks and safety sop in oil & gas production area	1	4	-	-
<i>Fire safety</i>	11	10	-	-
PC9. use the various appropriate fire extinguishers on different types of fires correctly.	2	3	-	-
PC10. 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	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Emergencies, rescue and first-aid procedures</i>	15	21	-	-
PC13. availability of first aid box & accessories	2	3	-	-
PC14. demonstrate how to free a person from electrocution	3	2	-	-
PC15. administer appropriate first aid to victims where required eg. in case of bleeding, burns, choking, electric shock, poisoning etc.	2	3	-	-
PC16. administer appropriate first aid in chemical hazard	2	3	-	-
PC17. 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	-	-
PC19. use/propoer utilization of breathing apparatus	1	2	-	-
PC20. ensure emergency preparation and resonse	1	2	-	-
NOS Total	42	58	-	-

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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	31/03/2017
Next Review Date	31/03/2019
Deactivation Date	NA
NSQC Clearance Date	09/10/2017

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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.

Scope

This unit/task covers the following:

- Work effectively with colleagues and supervisor

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 the work 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

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- 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
- KU20** offer assistance to a person with disability (PWD), only if require
- KU19.** adopt gender neutral behaviour while interacting with colleagues

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.** liaisoning 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

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- 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

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Assessment Criteria

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

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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	31/03/2017
Next Review Date	31/03/2019
Deactivation Date	NA
NSQC Clearance Date	09/10/2017

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HYC/N0104: Perform Production activities (On Shore and Off Shore)

Description

This unit is about Oil & Gas Production (On Shore and Off Shore)

Scope

This unit/task covers the following:

- Oil & Gas Production Processes
- Production Techniques
- Maintenance Techniques
- Maintenance Hand Tools
- Health and Safety in Production operations and Maintenance jobs
- Oil & Gas Production Processes (onsite training)

Elements and Performance Criteria

Oil & Gas Production Processes

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

- PC1.** understand production process in oil & gas field operation: oil and gas processing operations (well surveillance, monitoring & maintenance, wireline operation), oil & gas production processes (onsite training), (compressor), (static as well as mobile boilers), multi-phase separation in separators & emulsion treaters)
- PC2.** understand oil and gas processing operations (pigging, hottapping, new flow line laying, replacement of existing flow lines,clearing of flow lines plugging), (gas dehydration), (produced water), (water injection)
- PC3.** operation and maintenance of various well stimulation & servicing units, wireline units and new well completion
- PC4.** operation and maintenance of work-over well completion
- PC5.** carry out operation of crude oil upliftment through bousers, monitoring and maintenance of field indirect heaters ,emulsion treaters and crude oil storage tanks, oil and gas processing operations (gas treatment)

Health and Safety in Production and Maintenance

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

- PC6.** describe safe working practices for working in a maintenance workshop
- PC7.** describe the operation of safety documentation and procedures
- PC8.** identify relevant emergency requirements for a maintenance workshop
- PC9.** identify potential hazards in a workshop environment
- PC10.** describe the associated risks and implications for people, equipment and the environment
- PC11.** describe measures that could be taken to minimise the risks
- PC12.** communicate and work effectively as part of a team for maintenance tasks
- PC13.** take part in a tool box talk
- PC14.** use correct manual handling techniques for maintenance tasks

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PC15. select and use the correct personal protection equipment for maintenance tasks

PC16. maintain the workspace in a clean and tidy manner and dispose of waste

Basic Production Techniques

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

PC17. identify tools, equipment and material that would be required for a range of basic routine for off shore oil and gas production tasks

PC18. prepare the tools, equipment and materials for given production tasks

PC19. prepare the work area for given production tasks

PC20. identify tools, equipment and material that would be required for a range of basic routine for on shore oil and gas production tasks

PC21. prepare the tools, equipment and materials for given production tasks

PC22. prepare the work area for given production tasks

PC23. carry out basic routines for oil and gas production process

PC24. ensure appropriate cleaning routines using the correct cleaning agents

PC25. carry out routine lubrication, using the correct lubricant for the application

PC26. ensure oil levels and add oil as required

PC27. tighten fastenings using correct tools and equipment

PC28. check tensions and adjust as required

PC29. carry out basic visual inspection for common faults

PC30. record observed for any faults

PC31. clear work areas following pre and post production tasks

PC32. carry out basic production reporting data entry

PC33. interpretation of production data

Basic Maintenance Techniques and Practices

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

PC34. prepare for basic routine maintenance tasks

PC35. describe basic routine maintenance techniques

PC36. carry out basic routine maintenance tasks

PC37. carry out basic inspections

PC38. identify the use of basic maintenance hand tools

PC39. demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact

PC40. demonstrate the care of basic maintenance hand tools

Maintenance

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

PC41. describe the key features of prime movers

PC42. outline typical maintenance requirements of prime movers

PC43. know-how of the key features of transmission systems and components

PC44. outline typical maintenance requirements of transmission systems and components

PC45. describe the key features of distribution systems

PC46. knowledge of the key features of separation system

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- PC47.** understanding of the key features of tank systems
- PC48.** know-how of the key features of oil and gas transport systems
- PC49.** identify the key features of oil and gas well
- PC50.** understanding of the key features of srp systems
- PC51.** describe the key features of gas lift systems
- PC52.** knowledge the key features of rotating equipment and tools
- PC53.** outline typical maintenance requirements of rotating equipment and tools
- PC54.** outline typical maintenance requirements of measurement systems and equipment
- PC55.** outline typical maintenance requirements of control systems and equipment
- PC56.** outline typical maintenance requirements of protection and detection systems

Oil & Gas Production Processes (onsite training)

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

- PC57.** understand production operation and processes in oil & gas
- PC58.** indentify oil & gas equipments
- PC59.** understand the functionality of each equipment
- PC60.** understand standard operating procedures
- PC61.** understand preventive maintenance requirements
- PC62.** understand the record keeping and reporting instructions
- PC63.** understand the hse requirement
- PC64.** understand the emergency response roles and responsibility

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organisational sop on production 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 production 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:

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- 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.** courteous to the customers
- GS5.** liaisoning and coordination skills
- GS6.** communicate with supervisor and peers
- GS7.** communicate in the local language (preferable)
- GS8.** remain congenial while discussing and debating issues with co-workers
- GS9.** follow appropriate protocols for communication based on situation, hierarchy, organizational culture and practice
- GS10.** ask for, provide and receive required assistance where possible to ensure achievement of work related objectives
- GS11.** thank coworkers for any assistance received
- GS12.** offer appropriate respect based on mutuality and respect for fellow workmanship and authority
- GS13.** plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
- GS14.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS15.** identify immediate or temporary solutions to resolve delays
- GS16.** identify sources of support that can be availed of for problem solving for various kind of problems
- GS17.** seek appropriate assistance from other sources to resolve problems
- GS18.** report problems that you cannot resolve to appropriate authority
- GS19.** identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
- GS20.** apply problem-solving approaches in different situations
- GS21.** refer anomalies to the line manager
- GS22.** identify any issues affecting the material, equipment or surroundings
- GS23.** escalate issues that cannot be solved as per the troubleshooting/company manual

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Oil & Gas Production Processes</i>	3	6	-	-
PC1. understand production process in oil & gas field operation: oil and gas processing operations (well surveillance, monitoring & maintenance, wireline operation), oil & gas production processes (onsite training), (compressor), (static as well as mobile boilers), multi-phase separation in separators & emulsion treaters)	1	1	-	-
PC2. understand oil and gas processing operations (pigging, hottapping, new flow line laying, replacement of existing flow lines,clearing of flow lines plugging), (gas dehydration), (produced water), (water injection)	1	1	-	-
PC3. operation and maintenance of various well stimulation & servicing units, wireline units and new well completion	-	2	-	-
PC4. operation and maintenance of work-over well completion	1	-	-	-
PC5. carry out operation of crude oil upliftment through bousers, monitoring and maintenance of field indirect heaters ,emulsion treaters and crude oil storage tanks, oil and gas processing operations (gas treatment)	-	2	-	-
<i>Health and Safety in Production and Maintenance</i>	-	11	-	-
PC6. describe safe working practices for working in a maintenance workshop	-	1	-	-
PC7. describe the operation of safety documentation and procedures	-	1	-	-
PC8. identify relevant emergency requirements for a maintenance workshop	-	1	-	-
PC9. identify potential hazards in a workshop environment	-	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. describe the associated risks and implications for people, equipment and the environment	-	1	-	-
PC11. describe measures that could be taken to minimise the risks	-	1	-	-
PC12. communicate and work effectively as part of a team for maintenance tasks	-	1	-	-
PC13. take part in a tool box talk	-	1	-	-
PC14. use correct manual handling techniques for maintenance tasks	-	1	-	-
PC15. select and use the correct personal protection equipment for maintenance tasks	-	1	-	-
PC16. maintain the workspace in a clean and tidy manner and dispose of waste	-	1	-	-
<i>Basic Production Techniques</i>	2	17	-	-
PC17. identify tools, equipment and material that would be required for a range of basic routine for off shore oil and gas production tasks	-	1	-	-
PC18. prepare the tools, equipment and materials for given production tasks	-	1	-	-
PC19. prepare the work area for given production tasks	-	1	-	-
PC20. identify tools, equipment and material that would be required for a range of basic routine for on shore oil and gas production tasks	-	1	-	-
PC21. prepare the tools, equipment and materials for given production tasks	-	1	-	-
PC22. prepare the work area for given production tasks	-	1	-	-
PC23. carry out basic routines for oil and gas production process	-	1	-	-
PC24. ensure appropriate cleaning routines using the correct cleaning agents	-	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. carry out routine lubrication, using the correct lubricant for the application	-	1	-	-
PC26. ensure oil levels and add oil as required	-	1	-	-
PC27. tighten fastenings using correct tools and equipment	-	1	-	-
PC28. check tensions and adjust as required	-	1	-	-
PC29. carry out basic visual inspection for common faults	-	1	-	-
PC30. record observed for any faults	-	1	-	-
PC31. pc31. clear work areas following pre and post production tasks	-	1	-	-
PC32. carry out basic production reporting data entry	1	1	-	-
PC33. interpretation of production data	1	1	-	-
<i>Basic Maintenance Techniques and Practices</i>	7	7	-	-
PC34. prepare for basic routine maintenance tasks	1	1	-	-
PC35. describe basic routine maintenance techniques	1	1	-	-
PC36. carry out basic routine maintenance tasks	1	1	-	-
PC37. carry out basic inspections	1	1	-	-
PC38. identify the use of basic maintenance hand tools	1	1	-	-
PC39. demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact	1	1	-	-
PC40. demonstrate the care of basic maintenance hand tools	1	1	-	-
<i>Maintenance</i>	15	16	-	-
PC41. describe the key features of prime movers	-	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC42. outline typical maintenance requirements of prime movers	1	1	-	-
PC43. know-how of the key features of transmission systems and components	1	1	-	-
PC44. outline typical maintenance requirements of transmission systems and components	1	1	-	-
PC45. describe the key features of distribution systems	1	1	-	-
PC46. knowledge of the key features of separation system	1	1	-	-
PC47. understanding of the key features of tank systems	1	1	-	-
PC48. know-how of the key features of oil and gas transport systems	1	1	-	-
PC49. identify the key features of oil and gas well	1	1	-	-
PC50. understanding of the key features of srp systems	1	1	-	-
PC51. describe the key features of gas lift systems	1	1	-	-
PC52. knowledge the key features of rotating equipment and tools	1	1	-	-
PC53. outline typical maintenance requirements of rotating equipment and tools	1	1	-	-
PC54. outline typical maintenance requirements of measurement systems and equipment	1	1	-	-
PC55. outline typical maintenance requirements of control systems and equipment	1	1	-	-
PC56. outline typical maintenance requirements of protection and detection systems	1	1	-	-
<i>Oil & Gas Production Processes (onsite training)</i>	8	8	-	-
PC57. understand production operation and processes in oil & gas	1	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC58. identify oil & gas equipments	1	1	-	-
PC59. understand the functionality of each equipment	1	1	-	-
PC60. understand standard operating procedures	1	1	-	-
PC61. understand preventive maintenance requirements	1	1	-	-
PC62. understand the record keeping and reporting instructions	1	1	-	-
PC63. understand the hse requirement	1	1	-	-
PC64. understand the emergency response roles and responsibility	1	1	-	-
NOS Total	35	65	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	HYC/N0104
NOS Name	Perform Production activities (On Shore and Off Shore)
Sector	Hydrocarbon
Sub-Sector	Upstream
Occupation	Exploration & Production
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2017
Next Review Date	31/03/2019
Deactivation Date	NA
NSQC Clearance Date	09/10/2017

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.

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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/N0102.Occupational health and safety (OHAS)	42	58	-	-	100	25
HYC/N0103.Work effectively with colleagues and supervisor	22	70	-	-	92	25
HYC/N0104.Perform Production activities (On Shore and Off Shore)	35	65	-	-	100	50
Total	99	193	-	-	292	100

Acronyms

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

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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)	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.