



## QUALIFICATION PACK – OCCUPATIONAL STANDARD FOR INFRASTRUCTURE EQUIPMENT INDUSTRY

## What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- POS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding



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#### Introduction

## **Qualification Pack - Junior Mechanic (Engine)**

SECTOR: INFRASTRUCTURE EQUIPMENT

**SUB SECTOR:** Equipment service and spares

**OCCUPATION:** Equipment Maintenance

**REFERENCE ID:** IES/Q1102

ALIGNED TO: NCO-2004/ NIL

**Brief Job Description:** The primary role of a Junior Mechanic (engine) is to provide assistance to Mechanic (engine) in breakdown repair & preventive maintenance in issues related to engines of the equipment.

**Personal Attributes:** This job requires the individual to work independently as well as in teams. He Should have analytical skills, problem solving attitude, high concentration levels. Junior Mechanic Engine should have good hand-eye coordination, good eye-sight, no colour-blindness and should be able to complete precise and detailed work.

## Qualification Pack For Junior Mechanic (Engine)





Qualifications Pack Code	IES/Q1102		
Job Role	Junior Mechanic (Engine)		
Credits(NSQF)	TBD	Version number	1.0
Sector	Infrastructure Equipment	Drafted on	16/02/15
Sub-sector	Equipment service and spares	Last reviewed on	31/03/15
Occupation	Equipment Maintenance	Next review date	31/03/17
NSQC clearance on	31/03/15		

Job Role	Junior Mechanic (Engine)	
Role Description	Assist Mechanic (engine) in breakdown repair & preventive maintenance in issues related to engines of the vehicles	
NSQF level	3	
Minimum Educational Qualifications*	Preferably Class VIII	
Maximum Educational Qualifications*	NA	
Training	NA	
(Suggested but not mandatory)		
Minimum Job Entry Age	Preferably 18 years	
Experience	NA NA	
Applicable National Occupational Standards (NOS)	1. IES/N1102Assist in repair and maintenance of equipment's engine parts 2. IES/N7801Maintain the work area, tools and machine to support the operations 3. IES/N7602Comply with workshop health and safety guidelines  Optional: N.A.	
Performance Criteria	As described in the relevant OS units	

## Qualification Pack For Junior Mechanic (Engine)





Keywords /Terms	Description		
Sector	Sector is a conglomeration of different business operations having similar		
	businesses 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.		
Vertical	Vertical may exist within a sub-sector representing different domain areas		
	or the client industries served by the industry.		
Occupation	Occupation is a set of job roles, which perform similar/related set of		
	functions in an industry.		
Function	Function is an activity necessary for achieving the key purpose of the sector,		
	occupation, or area of work, which can be carried out by a person or a		
	group of persons. Functions are identified through functional analysis and		
	form the basis of OS.		
Sub-functions	Sub-functions are sub-activities essential to fulfil achieving the objectives of		
	the function.		
Job role	Job role defines a unique set of functions that together form a unique		
	employment opportunity in an organization.		
Occupational Standards	OS specify the standards of performance an individual must achieve when		
(OS)	carrying out a function in the workplace, together with the knowledge and		
	understanding; he/she needs to meet that standard consistently.		
	Occupational Standards are applicable both in the Indian and global		
	contexts.		
Performance Criteria	Performance Criteria 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 Code	Qualifications Pack Code is a unique reference code that identifies a		
	qualifications pack.		
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational,		
	training and other criteria required to perform a job role. A Qualifications		
	Pack is assigned a unique qualification 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 find the required one.		
Scope	Scope is the 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 the quality of required performance.		
Knowledge and	Knowledge and Understanding are statements which together specify the		
Understanding	technical, generic, professional and organizational specific knowledge that		
	an individual needs in order to perform up to the required standard.		

## Qualification Pack For Junior Mechanic (Engine)





Keywords /Terms	Description
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
NSQF	National Skill Qualifications Framework
ITI	Industrial Training Institute
HCV	Heavy Commercial Vehicle
SHE	Safety Health and Environment
SOP	Standard Operating Procedure
TBD	To Be Determined







#### Assist in repair and maintenance of equipment's engine parts

## National Occupational Standard



## **Overview**

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that need to be carried out for assisting mechanic (Engine) in testing, diagnosing, repairing and maintaining engines.







## Assist in repair and maintenance of equipment's engine parts

	in repair and maintenance of equipment's engine parts		
Unit Code	IES/N1102		
Unit Title (Task)	Assist in repair and maintenance of equipment's engine parts		
Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills		
	& Ability for activities that need to be carried out for assisting mechanic		
C	(Engine) in testing, diagnosing, repairing and maintaining engines.		
Scope	This unit/task covers the following:		
	a Dunal dayun Danain Assistanas		
	Breakdown Repair Assistance		
D. f	Maintenance Work Assistance		
Performance Criteria(PC			
Element	Performance Criteria		
Breakdown Repair	To be competent, the user/individual on the job must be able to:		
Assistance	PC1. Ensure availability of tools, spare parts, equipment and supplies for		
	repair work		
	PC2. Carry out visual inspection for leakage as per the mechanic's instruction		
	PC3. Disassemble broken or defective engine part to facilitate repair as per		
	Standard Operating procedure		
	PC4. Reassemble when repairs are complete as per Standard Operating procedure		
	PC5. Ensure appropriate Positioning of equipment, machinery, physical		
	structures, and other objects for assembly or installation, using hand		
	tools, power tools, and moving equipment as per mechanic's instruction		
	PC6. ensure appropriate condition of tools, equipment, and machines as per		
	Standard Operating Procedure		
	PC7. Ensure cleaning or lubrication of engine components, equipment,		
	instruments, tools, work areas, and other objects, using hand tools, power tools, and cleaning equipment as per the manufacturer's manual		
	PC8. Assist the mechanic in preparing parts list for procurement		
	PC9. Work safely at all times, complying with health and safety and other		
	relevant regulations, directives and guidelines		
	PC10. Handle and dispose waste based on environmental guidelines at the		
	work place		
Maintenance Work	PC11. Follow the maintenance schedule as per manufacturer's manual		
assistance	PC12. Assist in replacing the scheduled spare parts as per mechanic's		
	instruction		
	PC13. Assist in Replenish / change the consumables		
	PC14. Perform visual inspection to Verify in appropriate sequence, for the		
	engine, as per service manual, the following		
	leakage from parts		
	breakage of parts		
	unusual noise		
	under-rated performance		
	PC15. Check the engine indication as per manufacturer's manual		
	PC16. Check Air Filter as per manufacturer's manual		
	PC17. Clean Air Filter as per manufacturer's manual		
	PC18. Check Engine oil & coolant level as per manufacturer's manual		







## Assist in repair and maintenance of equipment's engine parts

1 133130	DC10. Depart and institute and experience of equipment stengthe parts		
	PC19. Report any instances where the parts need to be changed/repaired as		
	per company's guidelines		
	PC20. Assist to Change/Repair the defective part as per mechanic's instructions		
	PC21. Assist in post repair trials as per mechanic's instructions		
Knowledge and Unders			
A. Organizational Context	The user/individual on the job needs to know and understand:  KA1. The organization's procedures and guidelines related to Breakdown &		
(Knowledge of the	, ,		
company /	Maintenance services  KA2. The performance standards & procedures followed in the company		
organization and	KA3. Reporting structure in the company		
its processes)	KA4. Escalation matrix for reporting unresolved problems		
its processes,	KA5. Timeframe in which the complaint/problem should be resolved		
	KA6. Work target and review mechanism with supervisor for obtaining/		
	giving feedback related to performance process		
	KA7. Location of tools		
	KA8. Contact person in case of queries on procedure or products		
	KA9. Location and process for storage and disposal of waste material		
	KA10. Safety Policy of the company		
B. Technical	The user/individual on the job needs to know and understand:		
Knowledge	KB1. Manufacturer's specification of the engine in use		
	KB2. Techniques used to diagnose the faults through visual inspection		
	KB3. Methods to remove component from engine system without damage to		
	the components or surrounding structure		
	KB4. Usage of various hand tools (such as spanners, sockets, screwdrivers,		
	pliers, torque wrenches)		
	KB5. Methods to check that the tools and equipment to be used are correctly		
	calibrated, and are in a safe, tested and serviceable condition		
	KB6. Method to use all tools correctly, check and store after use		
	KB7. Methods to lay the removed components out in a logical sequence to aid re-assembly,		
	KB8. Methods that can be used to keep component parts together or in the		
	order that they were removed		
	KB9. Usage of tools in the rectification operations (such as alignment tools,		
	torque wrenches, presses)		
	KB10. Usage of sealants and lubricants of the correct specification for the		
	vehicle		
	KB11. Techniques to Clean/service different parts of engine		
	KB12. The hazards associated with diagnosing and rectifying engine faults		
	KB13. Usage of tools and equipment to minimize & reduce any risk		
Skills (S)			
A. Core Skills /	Writing Skills		
Generic Skills	The user/ individual on the job needs to know and understand how to:		
	SA1. Write, as required, in English or vernacular language		
	SA2. Record and document the basic details of repairs and maintenance		
	performed on various aggregates/ components		







## Assist in repair and maintenance of equipment's engine parts

1 100100	in repair and maintenance of equipment's engine parts		
	Reading Skills		
	The user/ individual on the job needs to know and understand how to:		
	SA3. Read work orders, specifications etc. related to the job role		
	SA4. Read the maintenance manual for understanding basic specifications of		
	the equipment/ process to be undertaken		
	SA5. Refer to operator and maintenance manuals to support work tasks		
	Oral Communication (Listening and Speaking Skills)		
	The user/ individual on the job needs to know and understand how to:		
	SA6. Interact with the mechanic/ supervisors, as required, to seek		
	clarifications and understand issues		
B. Professional Skills	Decision Making		
	The user/ individual on the job needs to know and understand how to:		
	SB1. Evaluate the situation to decide on seeking assistance from manager/		
	peers		
	Plan and Organize		
	The user/ individual on the job needs to know and understand how to:		
	SB2. Plan, prioritize and sequence work operations as per required schedule		
	and location		
	SB3. Organize and analyze information relevant to work		
	Customer Centricity		
	The user/ individual on the job needs to know and understand how to:		
	SB4. Provide service of the highest order to ensure customer satisfaction		
	Problem Solving		
	The user/individual on the job needs to know and understand how to:		
	SB5. Assist in repair and maintenance of equipment under the supervision of		
	the mechanic		
	SB6. Bring any noticeable issue in the component/sub-assemblies currently		
	working on or otherwise to the attention of the mechanic		
	Analytical Thinking		
	The user/individual on the job needs to know and understand how to:		
	SB7. Evaluate the complexity of the tasks to determine if any assistance		
	required from manager/ peers		
	Critical Thinking		
	The user/ individual on the job needs to know and understand how to:		
	SB8. Analyse, evaluate and apply the information gathered from observation,		
	experience, reasoning to act efficiently and effectively		
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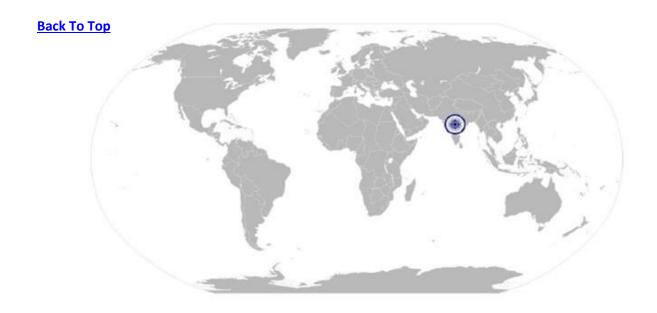




## Assist in repair and maintenance of equipment's engine parts

## **NOS Version Control**

NOS Code	IES/N1102		
Credits(NSQF)	TBD	Version number	1.0
Sector	Infrastructure Equipment	Drafted on	16/02/15
Industry Sub-sector	Equipment service and spares	Last reviewed on	31/03/15
Occupation	Equipment Maintenance	Next review date	31/03/15











Maintain the work area, tools and machine to support the operations

## National Occupational Standard



## **Overview**

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are neededtoMaintain the work area, tools and machine to support the operations.







Maintain the work area, tools and machine to support the operations

	the work area, tools and machine to support the operations		
Unit Code	IES/N7801		
Unit Title (Task)	Maintain the work area, tools and machine to support the operations		
Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills		
	& Ability for activities that are neededtoMaintain the work area, tools and		
	machine to support the operations.		
Scope	This unit/task covers the following:		
	<ul> <li>Work area / tools / machinery maintenance at work</li> </ul>		
Performance Criteria(P	C) w.r.t. the Scope		
Element	Performance Criteria		
Work area / tools /	To be competent, the user/individual on the job must be able to:		
machinery	PC1. Ensure safe handling of materials, machinery, equipment and tools		
maintenance at work	PC2. Assist in carrying out checks to ensure the environmental conditions		
	required are met		
	PC3. Follow correct lifting and handling procedures		
	PC4. Follow instructions with regard to materials to minimize waste		
	PC5. Ensure a clean and hazard free working area		
	PC6. Maintain tools and equipment as per organization guidelines and		
	manufacturer's instructions		
	PC7. Report the need for maintenance and/or cleaning outside your area of		
	responsibility		
	PC8. Report unsafe equipment and other dangerous occurrences		
	PC9. Ensure good condition of the appropriate machine guards for		
	equipment		
	PC10. Ensure use of appropriate cleaning equipment and methods appropriate		
	for the work to be carried out		
	PC11. Carry out cleaning according to schedules and limits of responsibility		
	PC12. Ensure safe disposal of waste		
Knowledge and Unders	tanding (K)		
A. Organizational	The user/individual on the job needs to know and understand:		
Context	KA1. The organization's procedures and guidelines related to Breakdown &		
(Knowledge of the	Maintenance services		
company /	KA2. The performance standards & procedures followed in the company		
organization and	KA3. Reporting structure in the company		
its processes)	KA4. Escalation matrix for reporting unresolved problems		
	KA5. Timeframe in which the complaint/problem should be resolved		
	KA6. Work target and review mechanism with supervisor for obtaining/		
	giving feedback related to performance process		
	KA7. Location of tools		
	KA8. Contact person in case of queries on procedure or products		
	KA9. Location and process for storage and disposal of waste material		
	KA10. Safety Policy of the company		
B. Technical	The user/individual on the job needs to know and understand:		
Knowledge	KB1. Work instructions and specifications and interpret them accurately		
	KB2. Lifting and handling procedures		







	National Occupational Standards		
Maintain	the work area, tools and machine to support the operations		
17200000	KB3. The importance of taking action when problems are identified		
	KB4. Different ways of minimizing waste		
	KB5. Different types of machine guards for equipment		
	KB6. The importance of running maintenance and regular cleaning		
	KB7. Effects of contamination on products i.e. machine oil, dirt		
	KB8. Maintenance procedures and manufacturer's instructions		
	KB9. Different types of cleaning equipment/ substances and their use		
Skills (S)	G T T T T T T T T T T T T T T T T T T T		
A. Core Skills /	Writing Skills		
Generic Skills	The user/ individual on the job needs to know and understand how to:		
	SA1. Write, as required, in English or vernacular language		
	Reading Skills		
	The user/ individual on the job needs to know and understand how to:		
	SA2. Read instructions, guidelines/procedures/rules		
	Oral Communication (Listening and Speaking Skills)		
	The user/ individual on the job needs to know and understand how to:		
	SA3. Interact with the mechanic/ supervisors, as required, to seek		
	clarifications and understand issues		
B. Professional Skills	Decision Making		
	The user/individual on the job needs to know and understand how to:		
	SB1. Evaluate the situation to decide on seeking assistance from superiors/		
	peers		
	Plan and Organize		
	The user/individual on the job needs to know and understand how to:		
	SB2. Organize and analyze information relevant to work		
	SB3. Plan and organize work area, tools, equipment and materials to		
	minimise any risk for health and safety related incident/accident		
	Customer Centricity		
	The user/ individual on the job needs to know and understand how to:		
	SB4. Ensure that the service provided is of the highest order to ensure		
	customer satisfaction		
	Problem Solving		
	The user/ individual on the job needs to know and understand how to:		
	SB5. Seek appropriate assistance from other sources to resolve problems		
	Analytical Thinking		
	The user/ individual on the job needs to know and understand how to:		
	SB6. Identify cause and effect relations in their area of work		
	Critical Thinking		

The user/individual on the job needs to know and understand how to:

SB7. Apply balanced judgment to different situations



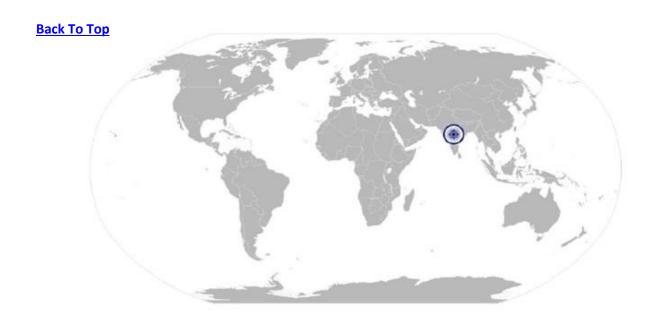






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NOS Code	IES/N7801		
Credits(NSQF)	TBD	Version number	1.0
Sector	Infrastructure Equipment	Drafted on	16/02/15
Industry Sub-sector	Equipment service and spares	Last reviewed on	31/03/15
Occupation	Equipment Maintenance	Next review date	31/03/15











#### Comply with workshop health and safety guidelines

# National Occupational Standard



## **Overview**

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for adhering to health and safety requirements at the service workshop during equipment maintenance.







Comply with workshop health and safety guidelines

	comply with workshop health and safety guidelines		
Unit Code	IES/N7602		
Unit Title (Task)	Comply with workshop health and safety guidelines		
Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills		
	& Ability for adhering to health and safety requirements at the service		
	workshop during equipment maintenance.		
Scope	This unit/task covers the following:		
	Service workshop health and safety		
Performance Criteria(Po	C) w.r.t. the Scope		
Element	Performance Criteria		
Service workshop	To be competent, the user/individual on the job must be able to:		
health and safety	PC1. Comply with safety, health, security and environment related		
,	regulations/ guidelines as per organizational/ manufacturer's policy		
	PC2. Carry out maintenance operations as per the manufacturer's and		
	workshop related health and safety guidelines/ standard operating		
	procedures		
	PC3. Follow safety regulations and procedures with regard to service		
	workshop hazards and risks		
	PC4. Use appropriate protective clothing/ equipment for specific tasks and		
	work conditions as per service manual		
	The state of the s		
	PC5. Lift and carry tools/equipment/components safely using correct		
	procedure as per the service manual		
	PC6. Use appropriate tools in a proper manner as given in the service manual		
	PC7. Keep the work area free from clutter and spillage		
	PC8. Store equipment and tools back at designated place post use and		
	inspect to make sure they are not left behind		
	PC9. Handle the storage and disposal of hazardous materials and waste in		
	compliance with health, safety and environmental guidelines		
	PC10. Operate various grades of fire extinguishers, as applicable		
	PC11. Support in administering basic first aid and report to concerned team		
	members, as required, in case of an accident		
	PC12. Respond promptly and appropriately to an accident/ incident or		
	emergency situation, within limits of your role and responsibility		
	PC13. Record and report details related to operations, incidents or accidents,		
	as applicable		
Knowledge and Unders	tanding (K)		
A. Organizational	The user/individual on the job needs to know and understand:		
Context	KA1. Health, safety, environmental(HSE) and security related policies/		
(Knowledge of the	guidelines of the organization		
company /	KA2. The importance of complying with health, safety, environmental and		
organization and	security guidelines during workshop operations		
its processes)	KA3. Contact details of personnel responsible for Health, Safety and		
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	environment (SHE) related matters		
	· ·		
	KA4. Location of workshop store, first aid station and safe assembly points KA5. Concerned personnel to reach out in case of emergencies and		







(	Compl	y	with	work	kshop	health	and	safe	ty	guideli	nes

	Comply with worksnop nealth and safety guidelines					
	accidents/ incidents					
	KA6. Reporting and documentation procedures for HSE and security matters					
B. Technical	The user/individual on the job needs to know and understand:					
Knowledge	KB1. Manufacturer's guidelines related to health and safety requirements					
	KB2. Common types of health, safety, environment and security risks related					
	to maintenance operations					
	KB3. Types, use and importance of Personal Protective Equipment (PPE) and					
	other safety clothing					
	KB4. Safe working practices to avoid common hazards and risks					
	KB5. Safe working practices when working with tools and machines					
	KB6. Safe working practices while working in different processes/ confined spaces					
	KB7. Various dangers associated with the use of electrical equipment					
	KB8. Various types of safety signs/ warnings and their meaning					
	KB9. Guidelines for transport, storage and disposal of hazardous materials					
	and waste					
	KB10. Types of common hazards and risks at the workshop including fire,					
	electrical, equipment related					
	KB11. Knowledge of safe lockdown/ stop of machinery use in case of					
	emergencies and incidents/ accidents					
	KB12. Types of fire extinguishers and their use					
	KB13. Common injuries and appropriate basic first aid treatment eg. electrical					
	shock, bleeding, wounds, fractures, minor burns, eye injuries					
Skills (S)	shock, bleeding, wounds, fractures, minor burns, eye injuries					
Skills (S) A. Core Skills /	shock, bleeding, wounds, fractures, minor burns, eye injuries  Writing Skills					
A. Core Skills /	Writing Skills					
A. Core Skills /	Writing Skills  The user/ individual on the job needs to know and understand how to:					
A. Core Skills /	Writing Skills  The user/ individual on the job needs to know and understand how to:  SA1. Document and report any health and safety related incidents/ accidents					
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Comply with workshop health and safety guid	idelines
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Comply with workshop nearth tha safety galactines					
	SB3. Build and maintain positive and effective relationships with colleagues				
	and customers				
	Problem Solving				
	The user/ individual on the job needs to know and understand how to:				
	SB4. Identify immediate or temporary solutions to resolve delays				
	SB5. Seek appropriate assistance from other sources to resolve problems				
	Analytical Thinking				
	The user/ individual on the job needs to know and understand how to:				
	SB6. Identify 'cause and effect' relations in own area of work				
	Critical Thinking				
	The user/ individual on the job needs to know and understand how to:				
	SB7. Apply balanced judgment to different situations				

## **NOS Version Control**

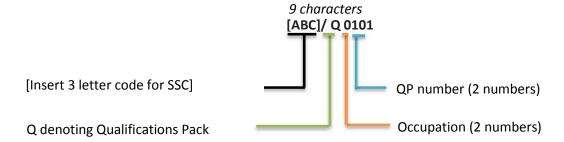
NOS Code	2. 2	IES/N7602	21-7			
Credits(NSQF)	TBD	Version number	1.0			
Sector	Infrastructure Equipment	Drafted on	16/02/15			
Industry Sub-sector	Equipment service and spares	Last reviewed on	31/03/15			
Occupation	Equipment Maintenance	Next review date	31/03/15			

**Back To Top** 

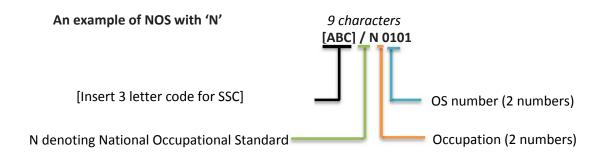


#### Nomenclature for QP and NOS units

#### **Qualifications Pack**



## **Occupational Standard**





#### Nomenclature for QP and NOS units

The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
<b>Equipment Operations</b>	1 to 10
Equipment Service and spares	11 to 20
<b>Equipment Production</b>	21 to 40
Equipment Sales	41 to 50
<b>Equipment Financing</b>	51 to 55
Core Enablers	56 to 65
Other Enablers	66 to 75
Common Occupations	76 to 85

Sequence	Description	Example
Three letters	Industry name	IES
Slash	/	/
Next letter	Whether <b>Q</b> P or <b>N</b> OS	N
Next two numbers	Occupation code	01
Next two numbers	OS number	01





#### **CRITERIA FOR ASSESSMENT OF TRAINEES**

<u>Job Role</u> Junior Mechanic (Engine) <u>Qualification Pack</u> IES/Q1102

Sector Skill Council Infrastructure Equipment

#### **Guidelines for Assessment**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
- 4. Individual assessment agencies will create unique evaulations for skill practical for every student at each examination/training center based on this criteria
- 5. To pass the Qualification Pack, every trainee should score a minimum of 70% aggregare
- 6. 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

				Marks Allocation		
NOS	PC	Total Mark	Out Of	Theory	Skills Practical	
1. IES/N1102 Assist in repair and maintenance of infrastructure equipment's engine parts	PC1. Ensure availability of tools, spare parts, equipment and supplies for repair work		2	1	1	
	PC2. Carry out visual inspection for leakage as per the mechanic's instruction		2	1	1	
	PC3. Disassemble broken or defective engine part to facilitate repair as per Standard Operating procedure	34	1	0	1	
	PC4. Reassemble when repairs are complete as per Standard Operating procedure		2	1	1	
	PC5. Ensure appropriate Positioning of equipment, machinery, physical structures, and other objects for assembly or installation, using hand tools,		1	0	1	

## Qualifications Pack ForJunior Mechanic (Engine)





 	1			
power tools, and moving				
equipment as per mechanic's				
 instruction	-			
PC6. ensure appropriate				
condition of tools, equipment,		1	0	1
and machines as per Standard		_		_
Operating Procedure	]			
PC7. Ensure cleaning or				
lubrication of engine				
components, equipment,				
instruments, tools, work areas,		4	1	3
and other objects, using hand		4	1	3
tools, power tools, and cleaning				
equipment as per the				
manufacturer's manual				
PC8. Assist the mechanic in				
preparing parts list for		1	0	1
 procurement				
 PC9. Work safely at all times,				
complying with health and safety				_
and other relevant regulations,		2	1	1
directives and guidelines				
PC10. Handle and dispose waste				
based on environmental		1	0	1
guidelines at the work place		1	U	1
PC11. Follow the maintenance		4	0	
schedule as per manufacturer's		1	0	1
 manual	-			
PC12. Assist in replacing the		4		
scheduled spare parts as per		1	0	1
mechanic's instruction				
PC13. Assist in Replenish / change		1	0	1
 the consumables	]	<u> </u>		
PC14. Perform visual inspection				
to Verify in appropriate				
sequence, for the engine, as per				
service manual, the following				
<ul> <li>leakage from parts</li> </ul>				
<ul> <li>breakage of parts</li> </ul>		4	1	3
unusual noise				
• under-rated				
performance				
 PC15. Check the engine indication	<del> </del>			
as per manufacturer's manual		1	0	1
 PC16. Check Air Filter as per	<del> </del>			
manufacturer's manual		1	0	1
	<del> </del>			
PC17. Clean Air Filter as per		2	1	1
manufacturer's manual		-	=	





## Qualifications Pack ForJunior Mechanic (Engine)

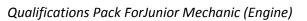
	PC18. Check Engine oil & coolant level as per manufacturer's manual		2	1	1
	PC19. Report any instances where the parts need to be changed/repaired as per company's guidelines		2	1	1
	PC20. Assist to Change/Repair the defective part as per mechanic's instructions		1	0	1
	PC21. Assist in post repair trials as per mechanic's instructions		1	0	1
		Total	34	9	25
2. IES/N7801 Maintain the work area, tools and machine to support the operations	PC1. Ensure safe handling of materials, machinery, equipment and tools		2	1	1
	PC2. Assist in carrying out checks to ensure the environmental conditions required are met		3	0	3
	PC3. Follow correct lifting and handling procedures		2	1	1
	PC4. Follow instructions with regard to materials to minimize waste		2	1	1
	PC5. Ensure a clean and hazard free working area		2	1	1
	PC6. Maintain tools and equipment as per organization guidelines and manufacturer's instructions	23	4	1	3
	PC7. Report the need for maintenance and/or cleaning outside your area of responsibility		2	1	1
	PC8. Report unsafe equipment and other dangerous occurrences		1	0	1
	PC9. Ensure good condition of the appropriate machine guards for equipment		1	0	1
	PC10. Ensure use of appropriate cleaning equipment and methods appropriate for the work to be carried out		2	1	1
	PC11. Carry out cleaning according to schedules and limits of responsibility		1	0	1





	DC42 France sets discount of	1	<u> </u>	1	
	PC12. Ensure safe disposal of waste.		1	0	1
	waste.				
		Total	23	7	23
3. IES/N7602Comply with workshop health and safety guidelines	PC1. Comply with safety, health, security and environment related regulations/ guidelines as per organizational/ manufacturer's policy		2	1	1
	PC2. Carry out maintenance operations as per the manufacturer's and workshop related health and safety guidelines/ standard operating procedures		4	1	3
	PC3. Follow safety regulations and procedures with regard to service workshop hazards and risks		2	1	1
	PC4. Use appropriate protective clothing/ equipment for specific tasks and work conditions as per service manual		2	1	1
	PC5. Lift and carry tools/equipment/components safely using correct procedure as per the service manual		4	1	3
	PC6. Use appropriate tools in a proper manner as given in the service manual	28	4	1	3
	PC7. Keep the work area free from clutter and spillage		2	1	1
	PC8. Store equipment and tools back at designated place post use and inspect to make sure they are not left behind		1	0	1
	PC9. Handle the storage and disposal of hazardous materials and waste in compliance with health, safety and environmental guidelines		1	0	1
	PC10. Operate various grades of fire extinguishers, as applicable		2	1	1
	PC11. Support in administering basic first aid and report to concerned team members, as required, in case of an accident		1	0	1
	PC12. Respond promptly and appropriately to an accident/ incident or emergency situation, within limits of your role and responsibility		1	0	1

Qualifications Pack ForJunior Mechanic (Engine)







PC13. Record and report details related to operations, incidents or accidents, as applicable		2	1	1
	Total	28	9	19