



QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR STRATEGIC MANUFACTURING INDUSTRY



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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
- OS 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

Qualifications Pack- Technician Ship Scrapper

SECTOR: STRATEGIC MANUFACTURING

SUB-SECTOR: Ship Building & Ship Repair

OCCUPATION: Ship Breaking

REFERENCE ID: SMC/Q 4501

ALIGNED TO: NCO-2015/ ISCO NIL

Brief Job Description: A technician ship scrapper dismantles, cuts, breaks and removes all internal structures, equipment and machineries of a decommissioned ship.

Personal Attributes: The individual has to organize work, which may be predictive and routine in nature involving basic degree of making choices, for responsible execution of familiar tasks. He should have basic communication (written and oral), arithmetic and algebraic principle skills. Also, understanding the initiative to improve efficiency and effectiveness in work.



Qualifications Pack for Technician Ship Scrapper

Qualifications Pack Code	SMC/Q 4501		
Job Role	Technician Ship Scrapper		
Credits (NSQF)	TBD	Version number	1.0
Sector	Strategic Manufacturing	Drafted on	05/11/ 2016
Sub-sector	Ship Building and Ship Repair	Last reviewed on	13/09/2017
Occupation	Ship Breaking	Next review date	12/09/2020
NSQC Clearance on	NA		

Job Details

Job Role	Technician Ship Scrapper
Role Description	A technician ship scrapper dismantles, cuts, breaks and removes all internal structures, equipment and machineries of a decommissioned ship.
NSQF level	4
Minimum Educational Qualifications	12 th Standard
Maximum Educational Qualifications	N/A
Prerequisite License or Training	N/A
Minimum Job Entry Age	18 years
Experience	1 year experience in shipyard
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> SMC/N 4501 Identification of processes and machinery for ship scrapping operations SMC/N 4502 Carry out ship scrapping operations SMC / N 9103 Work effectively in a collaborative environment SMC / N 9104 Maintain safe, hygiene and secure environment
Performance Criteria	As described in the relevant OS units



Qualifications Pack for Technician Ship Scrapper

Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interest. 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 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 analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique Employment opportunity in an organization.
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 they need 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.
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	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 verify that this is the appropriate OS they are looking for
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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 or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.



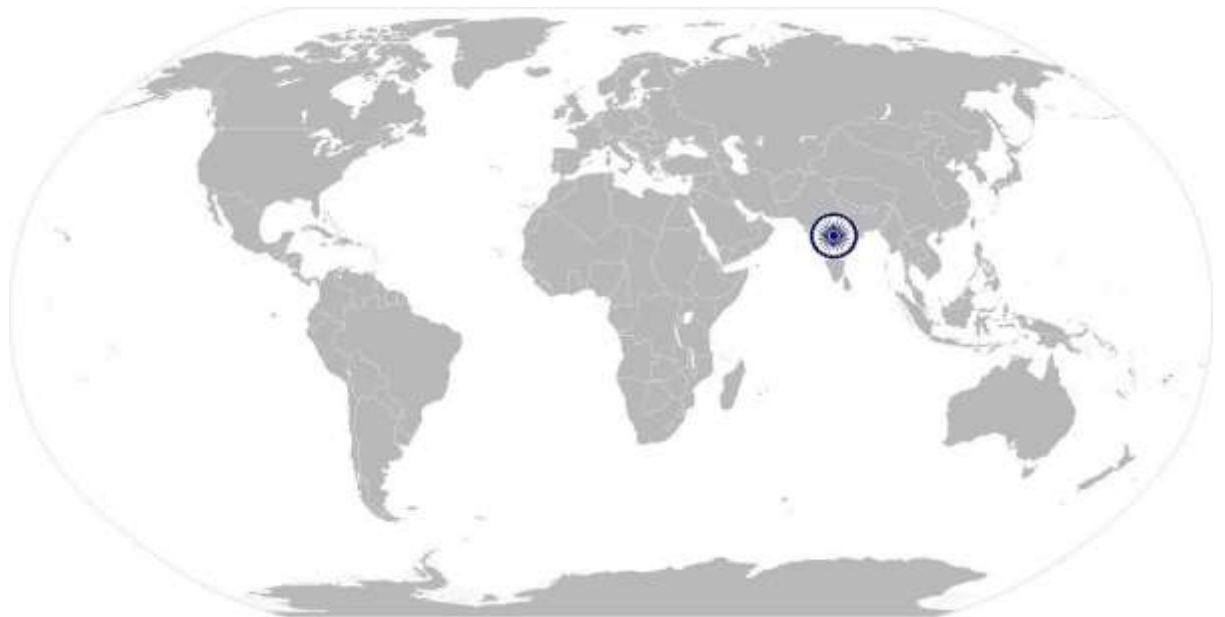
Qualifications Pack for Technician Ship Scrapper

Acronyms

Keywords /Terms	Description
SMSSC	Strategic Manufacturing Sector Skill Council
NOS	National Occupational Standards
NSQF	National Skills Qualification Framework
NVEQF	National Vocational Educational Qualification Framework
NVQF	National Vocational Qualification Framework
OS	Occupational Standards
PC	Performance Criteria
QP	Qualification Pack
SSC	Sector Skills Council



National Occupational Standard



Overview

This unit is about identification of processes and machinery required for ship scrapping operations.



SMC/N 4501 Identification of processes and machinery for ship scrapping operations

National Occupational Standard	Unit Code	SMC/N 4501
	Unit Title (Task)	Identification of processes and machinery for ship scrapping operations
	Description	This unit is about identification of processes and machinery required for ship scrapping operation taking into consideration all safety related compliances
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> Identification of processes and machinery required for ship scrapping operations
	Performance Criteria(PC) w.r.t. the Scope	
	Element	Performance Criteria
	Identification of processes and machinery required for ship scrapping operations	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> PC1. identify and apply de-welding markings and measurements related to scrapping PC2. identify and request for all types of acetylene metal cutting torches in a working state PC3. identify and request for the number of welding machines needed for tagging/cutting operation PC4. identify the support mechanism needed for cutting up heavy metal pieces PC5. identify internal and external torches based on state of cut hull PC6. identify the placement of tackles and pulleys, to lift dismantled plates
	Knowledge and Understanding (K)	
	A. Organizational Context (Knowledge of the organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. procedures followed in the company relevant to own employment and performance conditions KA2. own job role and responsibilities and sources for information pertaining to employment terms, entitlements, job role and responsibilities KA3. reporting structure, inter-dependent functions, lines and procedures in the work area KA4. importance and purpose of documentation in context of employment and work
	B. Technical Knowledge	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. use information from ship drawings KB2. methods of docking the ship such as anchoring or mooring to pier or beach head KB3. safety procedures to be followed while conducting scrapping operations KB4. knowledge of hazardous material that could be present in the ship KB5. types of protective clothing and gear KB6. knowledge of existing standards and guidelines on safe and environmentally sound management in ship dismantling KB7. methods of providing temporary support to various structures on ship



SMC/N 4501 Identification of processes and machinery for ship scrapping operations

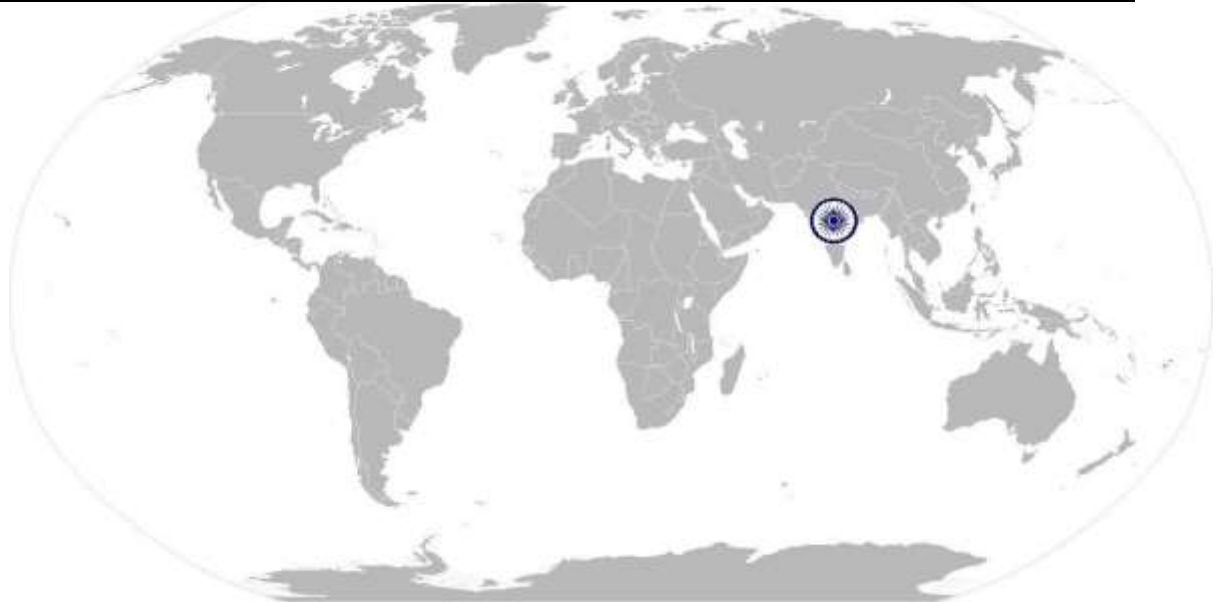
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. prepare and maintain documentation
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. read and understand manuals, health and safety instructions, other company documents SA3. read various colour codes, as per standard electrical, mechanical and civil nomenclature
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. express statements or information clearly so that others can hear and understand SA5. participate in and understand the main points of simple discussions SA6. communicate with superiors
B. Professional Skills	Organisational Skills
	The user/individual on the job needs to know and understand how to: SB1. follow organisation rule- based decision making process SB2. organize work schedule to meet deadlines
	Analytical thinking
The user/individual on the job needs to know and understand how to: SB3. apply domain knowledge, observations and data to select course of action to perform tasks	



SMC/N 4501 Identification of processes and machinery for ship scrapping operations

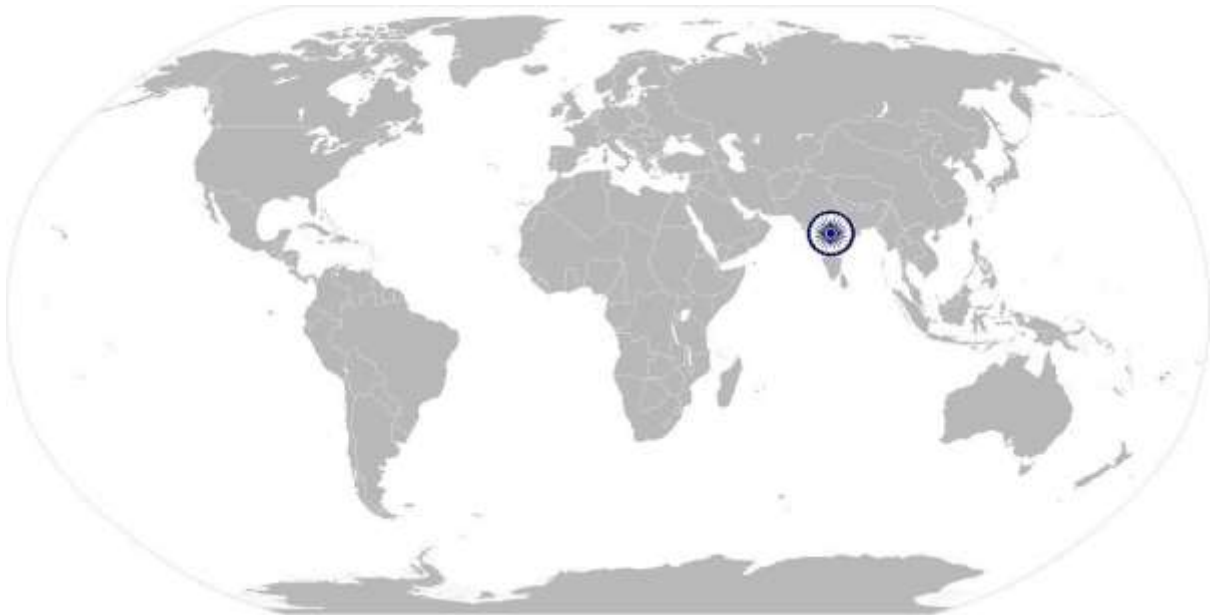
NOS Version Control

NOS Code	SMC/N 4501		
Credits (NSQF)	TBD	Version number	1.0
Industry	Strategic Manufacturing	Drafted on	05/11/2016
Industry Sub-sector	Ship Building and Ship Repair	Last reviewed on	13/09/2017
Occupation	Ship Breaking	Next review date	12/09/2020





National Occupational Standard



Overview

This unit is about carrying out ship scrapping operations.



SMC/N 4502

Carry out ship scrapping operations

National Occupational Standard

Unit Code	SMC/N 4502
Unit Title (Task)	Carry out ship scrapping operations
Description	This unit is about carrying out ship scrapping activity and ensuring post scrapping checks
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Carry out ship scrapping • Post scrapping check
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Carry out ship scrapping operations	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> PC1. carry out scrapping of engines, batteries, generators, copper wiring portholes, lifeboats, electronic dials and other marine equipment/fittings PC2. dismantle pipes and thermal insulations, floor tiles, vent flange gaskets PC3. set up, starting, controlling, adjusting and stopping machines, which will cut metal and hull, for ship scrapping PC4. cut the steel pieces as per the instruction PC5. cut the heavy metal pieces as per the instructions PC6. use lifting machines and small material handling machines PC7. segregate the structural pieces of ship as per the plan PC8. remove the equipment like fixtures, anchors, chains, furniture and small equipment PC9. carry out crane lift operations PC10. unpack space insulations PC11. dismantle exhaust duct insulations PC12. disintegrate burn covers and any other secondary machineries/ equipment
Carry out post scrapping checks	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> PC13. sort out the cut pieces of metals on the basis of visual inspections PC14. certify scrapping tools against receiving documents, noting and reporting discrepancies
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. procedures followed in the company relevant to own employment and performance conditions KA2. all types of ships such as cargo ships, passengers ships, cruise ships, ferries, war ships, frigate, crew ships, etc KA3. type of fishing vessels - small, medium and large KA4. relevant occupational health and safety requirements applicable in the work place KA5. own job role and responsibilities and sources for information pertaining to employment terms, entitlements, job role and responsibilities KA6. reporting structure, inter-dependent functions, lines and procedures in the work area



SMC/N 4502

Carry out ship scrapping operations

	KA7. importance and purpose of documentation in context of employment and work
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. methods of making rolling platforms on the ships</p> <p>KB2. methods of docking the ship such as anchoring or mooring to pier or beach head</p> <p>KB3. how to sample liquids and gases that would be present in a ship compartment</p> <p>KB4. how to operate material handling machines and lifting machines</p> <p>KB5. methods for controlling exposure to radiation</p> <p>KB6. how to fill up the reports, checklists and complete documentation</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to:
	SA1. prepare and maintain documentation
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. read vernacular/english language</p> <p>SA3. read and understand manuals, health and safety instructions, other company documents</p> <p>SA4. read various colour codes, as per standard electrical, mechanical and civil nomenclature</p>
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to:
	SA5. express statements or information clearly so that others can hear and understand
	SA6. participate in and understand the main points of simple discussions
B. Professional Skills	SA7. communicate with peers, superiors and sub-ordinates
	Plan and organize
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. organize work schedule to meet deadlines</p> <p>SB2. work constructively and collaboratively with others</p> <p>SB3. ask questions for better understanding</p>

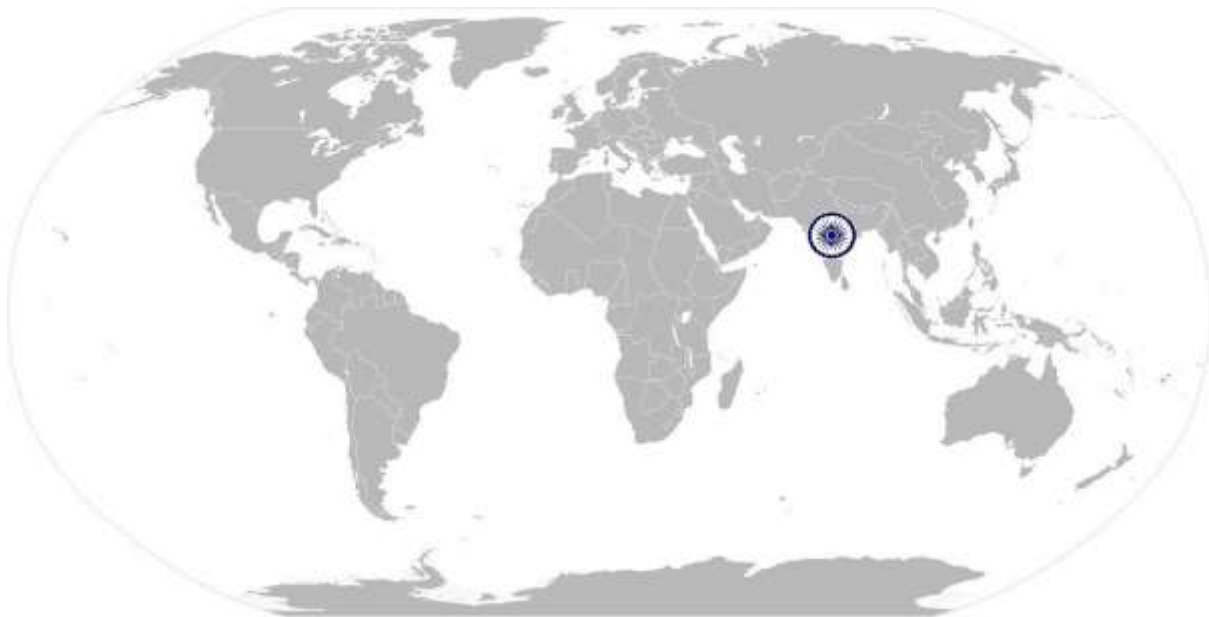


SMC/N 4502

Carry out ship scrapping operations

NOS Version Control

NOS Code	SMC/N 4502		
Credits (NSQF)	TBD	Version number	1.0
Industry	Strategic Manufacturing	Drafted on	05/11/2016
Industry Sub-sector	Ship Building & Ship Repair	Last reviewed on	13/09/2017
Occupation	Ship Breaking	Next review date	12/09/2020



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National Occupational Standard



Overview

This unit covers basic practices for working effectively with others in a collaborative environment, such as team work and cooperation, awareness of team and organisational goals, sharing of information, communicating effectively using appropriate etiquettes and behaviours, and interpersonal relations.



SMC/N 9103

Work effectively in a collaborative environment

National Occupational Standard	Unit Code	SMC/N 9103
	Unit Title (Task)	Work effectively in a collaborative environment
	Description	This unit covers basic practices for working effectively with others in a collaborative environment, such as team work and cooperation, awareness of team and organisational goals, sharing of information, communicating effectively using appropriate etiquettes and behaviour, and interpersonal relations.
	Scope	<p>This unit/task covers the following:</p> <p>Activities covered:</p> <ul style="list-style-type: none"> • Working effectively in a team • Etiquettes and behaviors for: <ul style="list-style-type: none"> • understanding & sharing information with others to enable efficient delivery of work • communicating with other members and people internal or external to the organization • Interpersonal relations
Performance Criteria(PC) w.r.t. the Scope		
Element	Performance Criteria	
Working effectively in a team	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. define own work and responsibilities</p> <p>PC2. collaborate and integrate own work with other people’s work</p> <p>PC3. consult with others to achieve smooth workflow and help in maximising effectiveness and efficiency in carrying out tasks</p> <p>PC4. discuss with the appropriate authority or person, any problems that arise, which may affect the work and remain unresolved</p> <p>PC5. carry out any commitments made to others</p> <p>PC6. learn skills from others that help in performing the work efficiently and share own skills with them, which may benefit their work</p>	



SMC/N 9103

Work effectively in a collaborative environment

<p>Etiquette and behaviors for sharing information and communicating effectively</p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC7. receive information and instructions accurately from the supervisor</p> <p>PC8. make sure that information being provided is within the purview of own authority and responsibility</p> <p>PC9. use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism</p> <p>PC10. etiquettes may include:</p> <ul style="list-style-type: none"> • use appropriate titles and terms of respect • use polite language • avoid casual expressions <p>PC11. display active listening skills while interacting with others at work and receiving feedback</p>
<p>Interpersonal relations</p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC12. develop understanding, goodwill and trust</p> <p>PC13. escalate unresolved grievances to appropriate authority</p>
<p>Knowledge and Understanding (K)</p>	
<p>A. Organizational Context (Knowledge of the organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. organisational chart and project schedules</p> <p>KA2. reporting structure, inter-dependent functions, lines and procedures in the work area</p> <p>KA3. effective working relationships with both internal and external the people with which the individual is required to interact</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. importance of developing effective working relationships</p> <p>KB2. importance of building rapport through collaboration and mutual support</p> <p>KB3. importance of knowledge sharing for effective working</p> <p>KB4. importance of effective communication in the workplace</p> <p>KB5. key elements of active listening</p> <p>KB6. importance of avoiding casual expletives and unpleasant terms while communicating in professional circles</p> <p>KB7. importance of communicating clearly and effectively with people face-to-face, by telephone and in writing</p> <p>KB8. types of working relationships that help people to work well together and the types of relationships that need to be avoided</p> <p>KB9. importance of discipline for professional success</p> <p>KB10. common reasons for interpersonal conflicts</p> <p>KB11. importance and ways of managing interpersonal conflict effectively</p> <p>KB12. expressing and addressing grievances appropriately and effectively</p>
<p>Skills (S)</p>	
<p>Oral Communication (Listening and Speaking skills)</p>	



SMC/N 9103

Work effectively in a collaborative environment

A. Core Skills/ Generic Skills	The user/ individual on the job needs to know and understand how to: SA1. express statements or information clearly so that others can hear and understand SA2. participate in and understand the main points of simple discussions SA3. respond appropriately to any queries SA4. communicate with employees
B. Professional Skills	Team Working Skills The user/individual on the job needs to know and understand how to: SB5. work constructively and collaboratively with others SB6. build rapport and cooperative relationships with internal team members and other departments for effective completion of work SB7. resolve conflicts within teams SB8. consider how one's actions will affect the other team members and the team as a whole





SMC/N 9103

Work effectively in a collaborative environment

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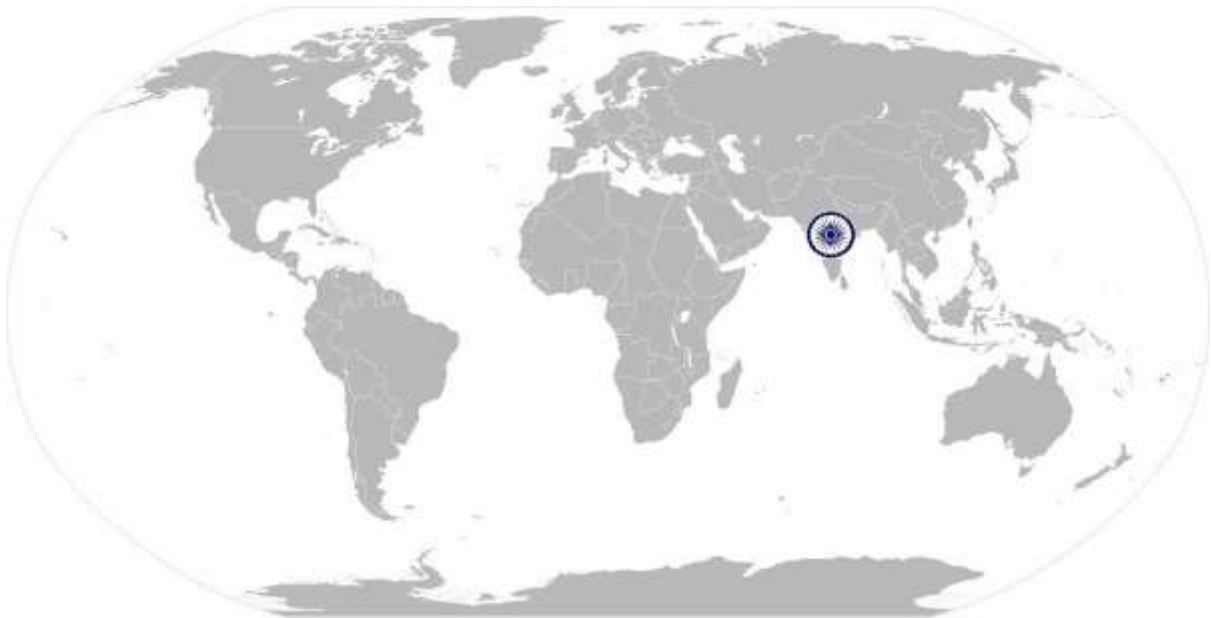
NOS Code	SMC/N 9103		
Credits (NSQF)	TBD	Version number	1.0
Industry	Strategic Manufacturing	Drafted on	05/11/2016
Industry Sub-sector	Common	Last reviewed on	13/09/2017
Occupation	Common	Next review date	12/09/2020



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National Occupational Standard



Overview

This unit covers procedures and practices to be followed to maintain a healthy, safe and secure work environment.



SMC/N 9104 Maintain a healthy, safe and secure working environment

National Occupational Standard	Unit Code	SMC/N 9104
	Unit Title (Task)	Maintain a healthy, safe and secure working environment
	Description	This unit is about maintaining a healthy, safe and secure work environment. It covers responsibilities towards self, others, assets and the environment.
	Scope	<p>This unit/task covers the following:</p> <p>Activities covered:</p> <ul style="list-style-type: none"> • maintain healthy workplace environment • maintain safe and secure environment • fire safety • emergencies, rescue and first-aid procedures
	Performance Criteria(PC) w.r.t. the Scope	
	Element	Performance Criteria
Maintain healthy workplace	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. maintain cleanliness and hygiene</p> <p>PC2. identify common health hazards and symptoms for self related to exposure of solvents, radiant energy during welding and cutting, asbestos fibers, etc</p>	
Maintain safe and secure environment	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC3. keep a look out for hazards in the workplace related to equipment, personal clothing, etc</p> <p>PC4. keep a lookout for following accommodation related safety aspects</p> <ul style="list-style-type: none"> • all emergency lights operational, color coded and marked with "E" • escape routes unobstructed; exits clearly marked • life jackets and immersion suits correctly stowed & marked • internal communications equipment tested and operating correctly • muster list signed and properly displayed at appropriate locations <p>PC5. keep a lookout for the following machinery spaces related safety aspects</p> <ul style="list-style-type: none"> • escape routes, ladders and emergency exits unobstructed and clearly marked • all handrails, guard-rails and safety guards correctly fitted and secured to protect against fall • all portable fire extinguishers correctly stowed, accessible and inspection dated • high voltage areas clearly marked • steering gear space free from oil, gratings or non-slip surfaces in place around the steering gear • shielding of high pressure fuel pipes is in place and steam pipes properly insulated 	



SMC/N 9104 **Maintain a healthy, safe and secure working environment**

	<ul style="list-style-type: none"> • self-closing device on sounding pipes and glass level gauges are functional & not tied in open position • chemicals properly labelled and stored properly, acids & alkalis segregated, MSDS & PPE available at site • approved First Aid supplies readily available, accessible and clearly marked <p>PC6. keep a lookout for the following deck area related safety aspects</p> <ul style="list-style-type: none"> • escape routes and embarking areas marked, unobstructed and no slipping and tripping hazards • “Danger-Enclosed Space” marked outside all such spaces having access other than via manholes • “Hydraulic Release Units” for life rafts and correctly fitted (incl. weak link) and within expiry date • all lifebuoys and lifeboats are correctly stowed, life buoy lights and smoke markers valid & in good condition • deck cranes, mooring winches & windlasses are free from oil leakages • area free of leaking pipes and fittings <p>PC7. report any accidents or near accidents quickly and accurately to the proper person</p>
Fire safety	<p>To be competent ,the user/individual on the job must be able to:</p> <p>PC8. use appropriate fire extinguishers like sand, water, foam, etc on different types of fires caused by welding, smoking, sparking, etc</p>
Emergencies, rescue and first-aid procedures	<p>To be competent ,the user/individual on the job must be able to:</p> <p>PC9. respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments</p> <p>PC10. participate in emergency procedures and move injured people and others in correct method during an emergency</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. responsibilities under the organization’s health, safety and security standards</p> <p>KA2. where one can get information about health, hygiene and safety at the workplace</p> <p>KA3. names of all the people responsible for health and safety in a workplace</p> <p>KA4. names and location of documents that refer to health and safety in the workplace</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. general rules on hygiene that one must follow</p> <p>KB2. knowledge of the adverse health effects that may be caused by the exposure to a hazard</p> <p>KB3. understand the physical signs and reactions related to exposures to such hazards</p> <p>KB4. knowledge of proper use of barriers that may be needed to protect an entrant from hazards</p>



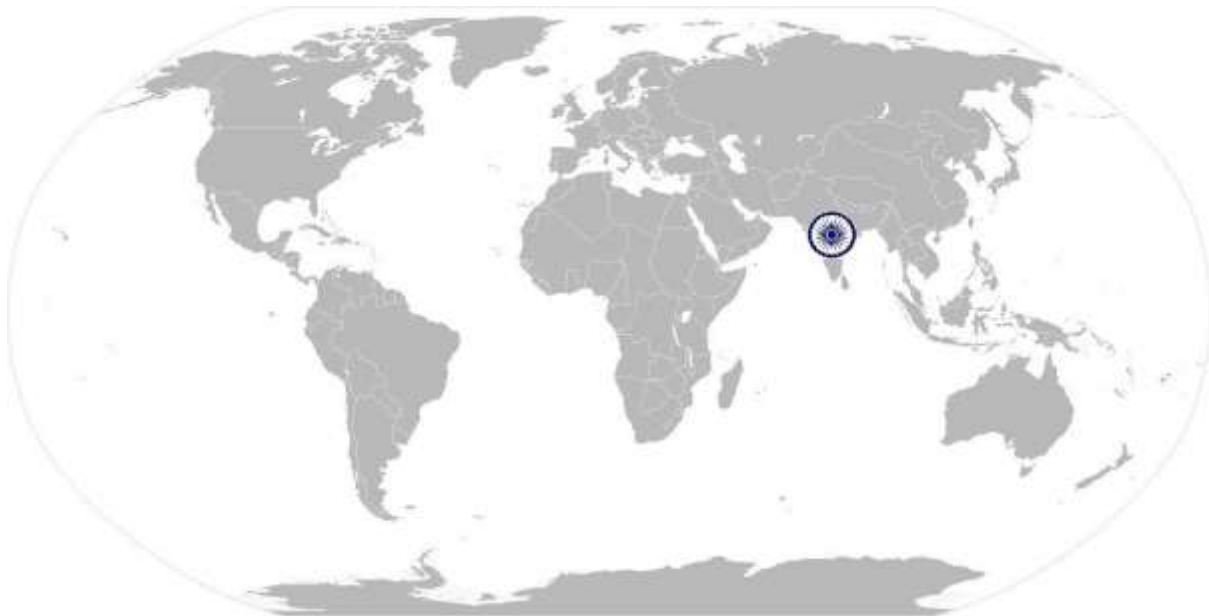
SMC/N 9104 **Maintain a healthy, safe and secure working environment**

	<p>KB5. knowledge of entry and exit of vessel and evacuation procedures in case of an emergency</p> <p>KB6. knowledge of what personal protective equipment is needed for safe entry into and exit from the space</p> <p>KB7. knowledge of emergency indicators like sirens and what it indicates</p> <p>KB8. knowledge of precautions to be taken in confined spaces</p> <p>KB9. knowledge of precautions to be taken while working with working machine tools</p> <p>KB10. knowledge of precautions to be taken to be taken while working in heights like safety nets, length of rope and other safety practices in marine industry</p> <p>KB11. awareness of work going on in surrounding areas</p> <p>KB12. awareness of gasses generated on board of ship</p> <p>KB13. awareness of toxic gases in confined spaces</p> <p>KB14. meaning of “hazards” and “risks”</p> <p>KB15. health and safety hazards commonly present in the work environment and related precautions</p> <p>KB16. possible causes of risk, hazard or accident in the workplace and why risk and/or accidents are possible</p> <p>KB17. methods of accident prevention</p> <p>KB18. hazards one can deal with oneself and hazards that must be reported to someone else</p> <p>KB19. where to find fire alarms and how to set them off</p> <p>KB20. various types of safety signs and what they mean</p> <p>KB21. the correct procedures for dealing with customers in case of emergencies</p> <p>KB22. content of written accident report</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	SA5. The user/ individual on the job needs to know and understand how to: SA6. prepare and maintain documentation
	Reading Skills
	SA7. The user/individual on the job needs to know and understand how to: SA8. read vernacular/english language SA9. read and understand health and safety instructions, other company documents SA10. read various colour codes, as per standard electrical, mechanical and civil nomenclature
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA11. express statements or information clearly so that others can hear and understand SA12. participate in and understand the main points of simple discussions SA13. respond appropriately to any queries SA14. communicate with employees



SMC/N 9104 Maintain a healthy, safe and secure working environment

B. Professional Skills	Decision making
	The user/individual on the job needs to know and understand how to: SB1. take decision with systematic course of actions and/or response
	Plan and organize
	The user/individual on the job needs to know and understand how to: SB2. organize work schedule to meet deadlines SB3. work constructively and collaboratively with others

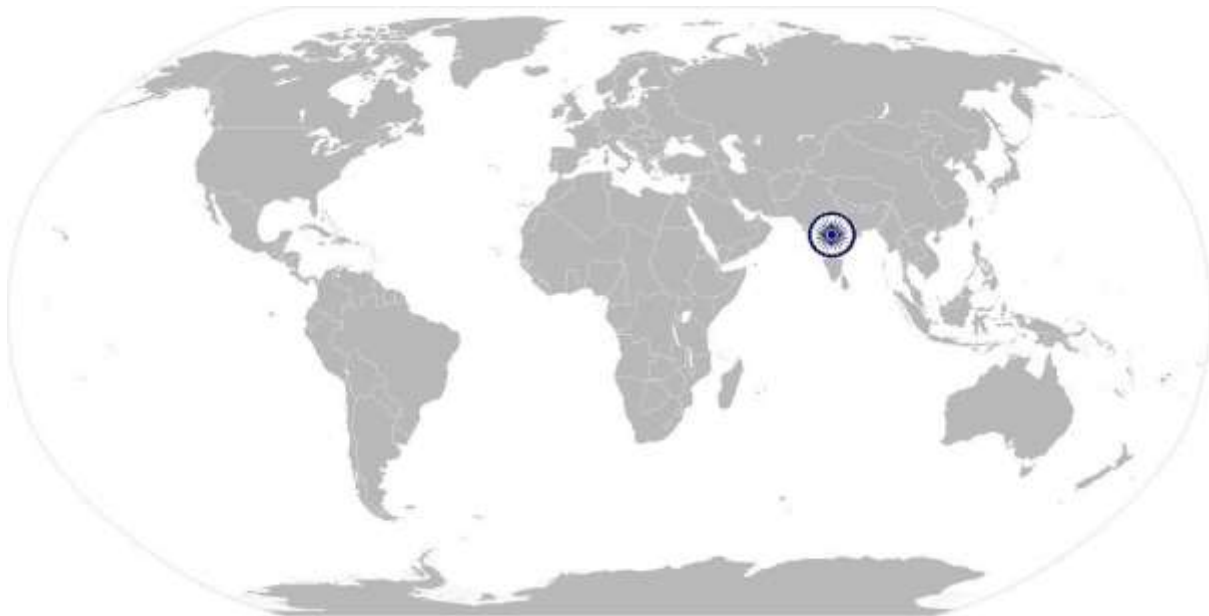




SMC/N 9104 Maintain a healthy, safe and secure working environment

NOS Version Control

NOS Code	SMC/N 9104		
Credits (NSQF)	TBD	Version number	1.0
Industry	Strategic Manufacturing	Drafted on	05/11/2016
Industry Sub-sector	Common	Last reviewed on	13/09/2017
Occupation	Common	Next review date	12/09/2020



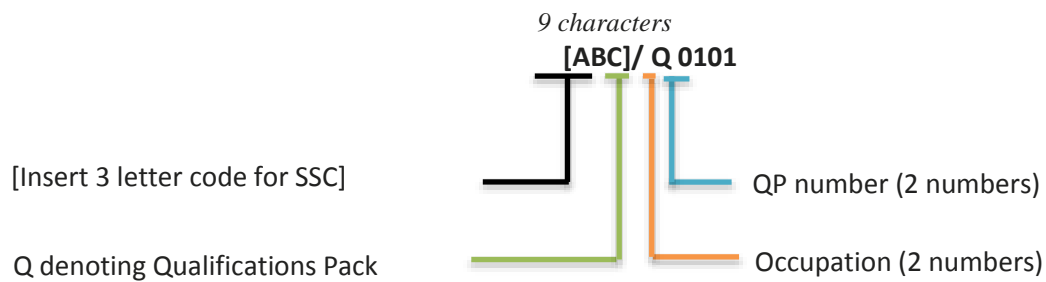
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Annexure

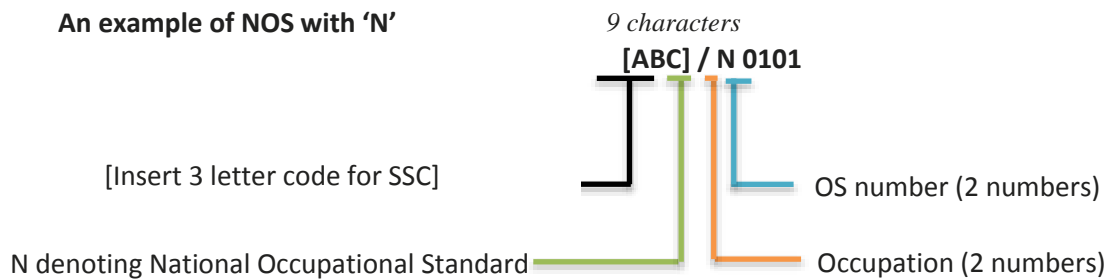
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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

Sub sectors	Range of occupation numbers
Defence Equipment - Land & Naval Systems	01-30
Ship building & Ship breaking	31-60
Electronic Security Equipment Manufacturing	61-75
Safety & Fire Fighting Equipment	76-90
Common	91-94

Sequence	Description	Example
Three letters	Industry name	SMC
Slash	/	/
Next letter	Whether QP or NOS	Q or N
Next two numbers	Occupation code	1
Next two numbers	OS number	1

Note :

- The range of occupation numbers have been decided based on the number of existing and future occupations in a segment



CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Technician Ship Scrapper

Qualification Pack SMC/Q 4501

Sector Skill Council Strategic Manufacturing

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. 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 this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS Total Marks: 400				Marks Allocation	
Assessment outcomes	Assessment criteria for outcomes	Total Marks	Out of	Theory	Skills/ Practical
SMC/N 4501 Identification of processes and machinery for ship scrapping operations	PC1. identify apply de-welding markings and measurements related to scrapping	100	20	7	13
	PC2. identify and request for all types of acetylene metal cutting torches in a working state		20	7	13
	PC3. identify and request for the number of welding machines for tagging/cutting operation		20	6	14



Compulsory NOS Total Marks: 400				Marks Allocation	
Assessment outcomes	Assessment criteria for outcomes	Total Marks	Out of	Theory	Skills/ Practical
	PC4. identify the support mechanism needed for cutting up heavy metal pieces		20	6	14
	PC5. identify the placement of tackles and pulleys, to lift dismantled plates		20	6	14
		Total	100	32	68
SMC/N 4502 Carry out ship scrapping operations	PC1. carry out scrapping of engines, batteries, generators, copper wiring portholes, lifeboats, electronic dials and other marine equipment/fittings	100	8	3	5
	PC2. dismantle pipes and thermal insulations, floor tiles, vent flange gaskets		8	3	5
	PC3. set up, starting, controlling, adjusting and stopping machines, which will cut metal and hull, for ship scrapping		7	2	5
	PC4. cut the steel pieces as per the instruction		7	2	5
	PC5. cut the heavy metal pieces as per the instructions		7	2	5
	PC6. use lifting machines and small material handling machines		7	2	5
	PC7. segregate the structural pieces of ship as per the plan		7	2	5
	PC8. remove the equipments like fixtures, anchors, chains, furnitures and small equipments		7	2	5
	PC9. carry out crane lift operations		7	2	5
	PC10. unpack space insulations		7	2	5
	PC11. dismantle exhaust duct insulations		7	2	5
	PC12. disintegrate burn covers and any other secondary machineries/equipments		7	2	5



Compulsory NOS Total Marks: 400				Marks Allocation	
Assessment outcomes	Assessment criteria for outcomes	Total Marks	Out of	Theory	Skills/ Practical
	PC13. sort out the cut pieces of metals on the basis of visual inspections		7	2	5
	PC14. certify scrapping tools against receiving documents, noting and reporting discrepancies		7	2	5
	Total		100	30	70
SMC/N 9103 Work effectively in a collaborative environment	PC1. define own work and responsibilities	100	7	1	6
	PC2. collaborate and integrate own work with other people's work		7	1	6
	PC3. consult with others to achieve smooth workflow and help in maximising effectiveness and efficiency in carrying out tasks		7	1	6
	PC4. discuss with the appropriate authority or person, any problems that arise, which may affect the work and remain unresolved		7	2	5
	PC5. carry out any commitments made to others		8	3	5
	PC6. learn skills from others that help in performing the work efficiently and share own skills with them, which may benefit their work		8	3	5
	PC7. receive information and instructions accurately from the supervisor and colleagues		8	3	5
	PC8. make sure that information being provided is within the purview of own authority and responsibility		8	3	5
	PC9. use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism		8	3	5
	PC10. exhibit proper work etiquettes		8	3	5
	PC11. display active listening skills while interacting with others at work and receiving feedback		8	3	5



Compulsory NOS Total Marks: 400				Marks Allocation	
Assessment outcomes	Assessment criteria for outcomes	Total Marks	Out of	Theory	Skills/ Practical
	PC12. develop understanding, goodwill and trust with team members		8	2	6
	PC13. escalate unresolved grievances to appropriate authority		8	2	6
		Total	100	32	68
SMC/N 9104 Maintain a healthy, safe and secure working environment	PC1. maintain cleanliness and hygiene	100	10	4	6
	PC2. identify common health hazards		10	4	6
	PC3. keep a look out for hazards		10	4	6
	PC4. keep a lookout for accommodation for safety		10	4	6
	PC5. keep a lookout for the machinery		10	4	6
	PC6. keep a lookout for the deck		10	4	6
	PC7. report any accidents or near accidents quickly and accurately to the proper person		10	4	6
	PC8. use appropriate fire extinguishers on different types of fires correctly causes of fires		10	4	6
	PC9. respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments		10	3	7
	PC10. participate in emergency procedures and move injured people and others in correct method during an emergency		10	1	9
		Total	100	36	64