



QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GEMS AND JEWELLERY 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

OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:

Gem and Jewellery Skill Council of India, 3rd floor, BFC building, SEEPZ, Andheri East, Mumbai - 400096

E-mail: <u>ceo@gjsci.org</u>





CONTENTS

- 1. Introduction and Contacts.....[P1]
- 2. <u>Qualifications Pack......[P2]</u>
- 3. <u>Glossary of Key Terms[P3]</u>
- 4. <u>OS Units.....[P5]</u>
- 5. <u>Annexure: Nomenclature for QP & OS.[P17]</u>
- 6. Assessment Criteria......[P19]

Introduction

Qualifications Pack – Solderer - Imitation Jewellery

SECTOR: GEMS & JEWELLERY SUB-SECTOR: Imitation Jewellery OCCUPATION: Soldering REFERENCE ID: G&J/Q1401 ALIGNED TO: NCO - 2015/NIL

Brief Job Description: The individual at work in imitation jewellery manufacturing joins various components as per the design requirement of the jewellery, accessories etc. The individual joins two metal parts, and broken parts, resize rings, earring post, pendant loop, etc. with high precision using soldering iron. The individual weld the component part or assembly at the precise location. A solderer is also known as 'Welder' in the Imitation jewellery making industry. This role in the imitation jewellery manufacturing is evolving as customers prefer high precision in the jewellery and accessories products.

Personal Attributes: The job requires the individual to have: integrity; attention to details; hand-eye coordination; ability to work in a process driven team for long hours in sitting position; a lot of patience; and creativity. The individual must work in small groups in an enclosed area with minimum hazards when dealing with sharp tools.





Qualifications Pack Code	G&J/Q1401			
Job Role	Solderer – Imitation Jewellery			
Credits (NSQF)	TBD Version number 1.0			
Sector	Gems & Jewellery	Drafted on	28/08/2016	
Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017	
Occupation	Soldering Next review date 31/07/2021			
NSQC Clearance on*	DD/MM/YYYY			

*only after clearance from NSQC

Job Role	Solderer – Imitation Jewellery	
Role Description	Joining various components as per the design requirement of the jewellery, accessories etc.	
NSQF level	3	
Minimum Educational Qualifications*	Basic Literacy Skill	
Maximum Educational Qualifications*	Not applicable	
Training (Suggested but not mandatory)	Not applicable	
Minimum job entry age	16 years	
Experience	Not applicable	
Applicable National Occupational Standards (NOS)	 Compulsory: 1. <u>G&J/N1401 Soldering Imitation jewellery pieces and accessories</u> 2. <u>G&J/N9904 Coordinate with co-workers</u> 3. <u>G&J/N9905 Maintain safe work environment</u> 	
Performance Criteria	As described in the relevant OS units	





Keywords /Terms Description 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 is derived from a further breakdown based on the characteristics and Sub-sector interests of its components. Occupation is a set of job roles, which perform similar/ related set of functions Occupation in an industry. Job role defines a unique set of functions that together form a unique Job role employment opportunity in an organisation. **Occupational Standards** OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and (OS)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. National Occupational NOS are occupational standards which apply uniquely in the Indian context. Standards (OS) Qualifications Pack (QP) QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code. Unit Code Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N' Unit Title Unit title gives a clear overall statement about what the incumbent should be able to do. Description Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for. Scope Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required. Knowledge and Knowledge and understanding are statements which together specify the Understanding 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 Core skills or generic skills are a group of skills that are the key to learning and Skills working in today's world. These skills are typically needed in any work environment in today's world. In the context of the OS, these include communication related skills that are applicable to most job roles.

Definitions



Qualifications Pack for Solderer – Imitation Jewellery



Acronyms

Keywords /Terms	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack

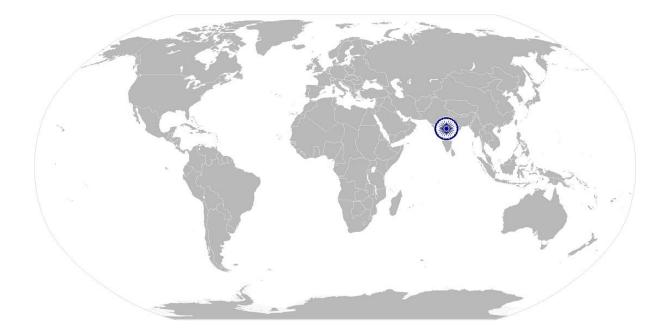






Soldering imitation jewellery pieces and accessories

National Occupational Standard



Overview

This unit is about soldering imitation jewellery and accessories. It focuses on the customers' need to give them high precision jewellery and accessories as per their demand.







Soldering imitation jewellery pieces and accessories

Unit Code	G&J/N1401	
Unit Title (Task)	Soldering imitation jewellery pieces and accessories	
Description	This OS unit is about soldering imitation jewellery pieces and accessories	
Scope	 This unit/task covers the following: Soldering Jewellery Achieving productivity Maintaining quality of output Handling problems 	
Performance Criteria(P	C) w.r.t. the Scope	
Element	Performance Criteria	
Soldering jewellery	 To be competent, the user/individual on the job must be able to: PC1. Collect jewellery pieces and inspect for any imperfections or defects such as broken parts, excess metal etc. PC2. Check and identify the area to be soldered PC3. Prepare metal and add flux PC4. Torch the metal and quench it PC5. Handle soldering iron carefully 	
Achieving productivity	 PC6. Minimize damage to the product while working PC7. Align and weld the component part or assembly at the precise location PC8. Deliver jewellery pieces/ accessories to next process timely 	
Maintaining quality of output	 PC9. Deliver defect free and evenly set jewellery pieces/ accessories PC10. Deliver maximum number of Quality Control certified pieces/ accessories PC11. Rework on the product returned from QC 	
Handling problems	PC12. Deliver complete jewellery/ accessories on time by reporting problems faced or anticipated well in advance	
Knowledge and Unders	standing (K)	
A. Organizational Context	 The user/individual on the job needs to know and understand: KA1. Company policies on : quality, delivery timelines, safety and hazards, integrity and personal management KA2. Importance of individual's role in the workflow KA3. Reporting Structure 	
B. Technical Knowledge	 KB1. Imitation jewellery and accessories making process KB2. Types of jewellery (product, styles, regional, traditional, making technique) KB3. Soldering two metal parts, and broken parts, resize rings, earring post, pendant loop, etc. with high precision using soldering iron 	







G&J/N1401 Soldering imitation jewellery pieces and accessories

Skills (S) [Optional]	
A. Core Skills/	Writing Skills
Generic Skills	The user/ individual on the job needs to know and understand how to: SA1. Prepare notes, task lists and schedule with co-workers SA2. Prepare progress reports
	Reading Skills
	 SA3. Read notes and put notes on design SA4. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)
	 SA5. Discuss task lists, schedules and work-loads with co-workers SA6. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA7. Keep seniors informed about the progress of work
B. Professional Skills	Decision Making
	SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level
	Plan and Organize
	SB2. Plan and organize the work according to the requirement by doing time management so the goal can be achieved
	Customer Centricity
	SB3. Use customer centric approach that provides a positive customer experience before and after the sale in order to drive repeat business, customer loyalty and profits
	Problem Solving
	SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
	SB5. Identify immediate or temporary solutions to resolve delays
	Analytical Thinking
	SB6. Analyze activities by breaking them down into single and manageable components
	SB7. Pass on relevant information to others
	Critical Thinking
	SB8. Anticipate process disruption and reasons for delay



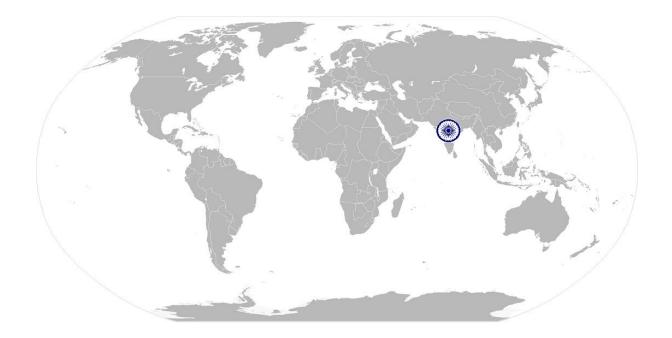




G&J/N1401 Soldering imitation jewellery pieces and accessories

NOS Version Control

NOS Code	G&J/N1401		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Soldering	Next review date	31/07/2021



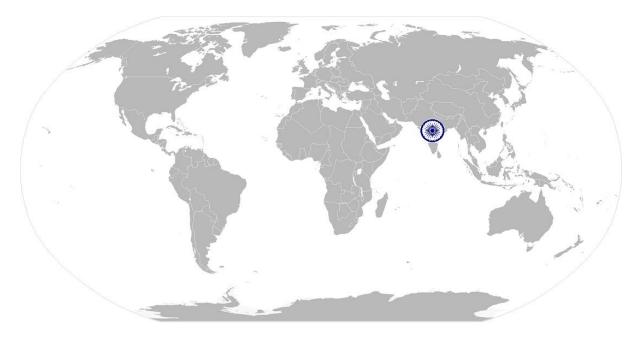






Coordinate with co-workers

National Occupational Standard



Overview

This unit is about the solderer's level of communication with colleagues or clients. It determines the individual's ability to work as a team member, share work and multi-task in order to achieve the required deliverables on schedule.







Coordinate with co-workers

Unit Code	G&J/ N9904
Unit Title (Task)	Coordinate with co-workers
Description	This OS unit is about communicating with colleagues and seniors in order to maintain smooth work flow
Scope	 This unit/task covers the following: Interacting with supervisor Interacting with colleagues and other departments
Performance Criteria(P	PC) w.r.t. the Scope
Element	Performance Criteria
Interacting with supervisor	 To be competent, the user/individual on the job must be able to: PC1. Understand the work output requirements and work accordingly PC2. Comply with company policy end rules and work accordingly PC3. Deliver quality work on time as required by reporting any anticipated reasons for delay
Interacting with colleagues and other departments	PC4. Put team over individual goals and work with team PC5. Resolve conflicts and multi-task
Knowledge and Unders	standing (K)
A. Organizational Context	The user/individual on the job needs to know and understand: KA1. Company's policies on personnel management KA2. Work flow involved in company's jewellery manufacturing process KA3. Importance of the individual's role in the workflow KA4. Reporting structure
B. Technical Knowledge	 KB1. Various categories of people that one is required to communicate and coordinate within the organization KB2. Importance of effective communication in the workplace KB3. Various components of effective communication KB4. Key elements of active listening KB5. Barriers to effective communication
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills The user/ individual on the job needs to know and understand how to: SA1. Write instructions, remarks, job sheets, basic information, technical details
	etc. in preferred local language of communication and English Reading Skills
	SA2. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)







the second

G&J/N9904

Coordinate with co-workers

	SA3.	Discuss task lists, schedules, and work-loads with co-workers
	SA4.	Question co-workers appropriately in order to understand the nature of
		problem and to make a diagnosis
	SA5.	Keep seniors informed about the progress of work
	5/13.	
B. Professional Skills	Decisio	on Making
	SB1.	Make decisions pertaining to the concerned area of work to implement them
		on personal or organizational level
	Plan a	nd Organize
	SB2.	Plan and organize the work according to the requirement by doing time
		management so the work goal can be achieved
	Custor	ner Centricity
	SB3.	Check that your own work meets customer requirements by conveying
		accurate information to right person
	Proble	m Solving
	SB4.	Think through the problem, evaluate the possible solution (s) and suggest an
	5. S. S.	optimum/ best possible solution (s)
	SB5.	Identify immediate or temporary solutions to resolve delays
		ical Thinking
	SB6.	Provide relevant information to others
	SB7.	Analyze needs, requirements and dependencies in order to meet your work
	- Anno	requirements
	Critica	l Thinking
	SB8.	Anticipate process disruption and reasons for delay
	\sim	



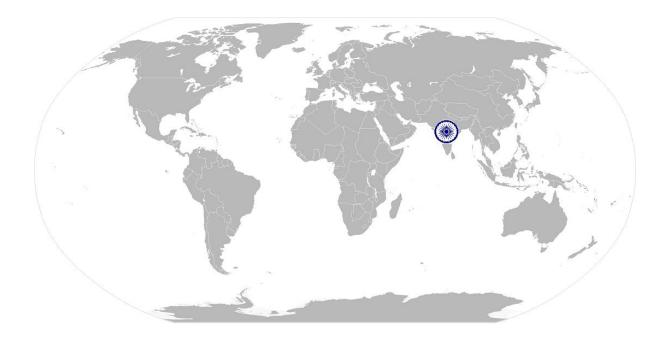




Coordinate with co-workers

NOS Version Control

NOS Code	G&J/N9904		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Soldering	Next review date	31/07/2021



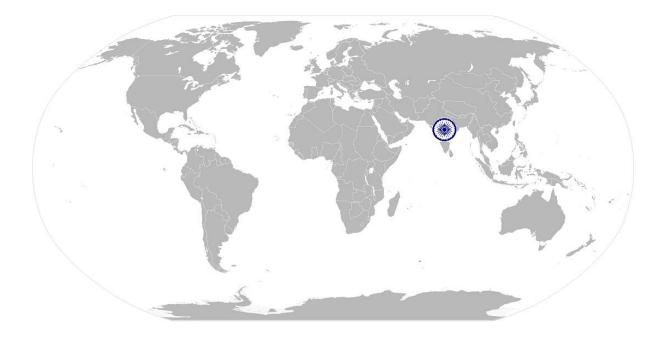






Maintain safe work environment

National Occupational Standard



Overview

This unit is about the individual's commitment towards reporting potential hazards and avoid accidents in order to make the work environment safe for self and colleagues.







Maintain safe work environment

Unit Code	G&J/N9905		
Unit Title (Task)	Maintain safe work environment		
Description	This OS unit is about being aware of, communicating and taking steps towards minimizing potential hazards and dangers of accidents on the job and maintaining health and safety		
Scope	 This unit/task covers the following: Communicating potential accident points Using safety gear to avoid accidents 		
Performance Criteria(P	PC) w.r.t. the Scope		
Element	Performance Criteria		
Communicating	To be competent, the user/individual on the job must be able to:		
potential accident	PC1. Spot and report potential hazards on time		
points	 PC2. Follow company policy and rules regarding use of hazardous materials while working PC3. Attend and actively participate in the health and safety campaigns organised by the company 		
	 PC4. Follow process flow improvements that can reduce anticipated or repetitive hazards PC5. Stay away from electrical instruments that could result in accident 		
Using safety measures to avoid accidents	 PC6. Understand which safety gear must be used for a particular task and use it accordingly PC7. Attend fire drills organised by the company or industrial zone PC8. Learn to use first aid procedure PC9. Be alert about designated assembly area in the event of an emergency and use when required PC10. Understand and follow the evacuation procedure properly during a fire 		
Knowledge and Unders	standing (K)		
A. Organizational Context	The user/individual on the job needs to know and understand: KA1. Company's policies on handling: harmful chemicals and sharp tools, safety and hazards of machines, fire safety and, disposal of harmful chemicals and materials		
	KA2. Work flow involved in company's jewellery manufacturing process		
	KA3. Importance of the individual's role in the workflow		
	KA4. Reporting structure		
B. Technical	KB1. How different chemicals react and what could be the danger from them		
Knowledge	KB2. How to use machines and tools without causing bodily harm		
Kilowieuge	KB3. Fire safety education		
	KB4. First aid execution		
	KB5. Disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy		









Maintain safe work environment

Skills (S) [Optional]				
A. Core Skills/	Writing Skills			
Generic Skills	The user/ individual on the job needs to know and understand how to: SA1. Prepare notes, task lists and schedule with co-workers SA2. Prepare progress reports			
	Reading Skills			
	 SA3. Read notes and put notes on design SA4. Read company rules and compliance documents required to complete the work 			
	Oral Communication (Listening and Speaking skills)			
	 SA5. Discuss task lists, schedules and work-loads with co-workers SA6. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA7. Keep seniors informed about the progress of work 			
B. Professional Skills	Decision Making			
	SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level			
	Plan and Organize			
	SB2. Plan and organize the work to meet health, safety and security requirements			
	Customer Centricity			
	SB3. Use customer centric approach that provides a positive customer experience before and after the sale in order to drive repeat business, customer loyalty and profits			
	Problem Solving			
	SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)			
	SB5. Identify immediate or temporary solutions to resolve delays			
	Analytical Thinking			
	SB6. Analyze activities by breaking them down into single and manageable components			
	Critical Thinking			
	SB7. Anticipate process disruption and reasons for delay			







Maintain safe work environment

NOS Version Control

NOS Code	G&J/N9905		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Soldering	Next review date	31/07/2021





G&J/Q1401

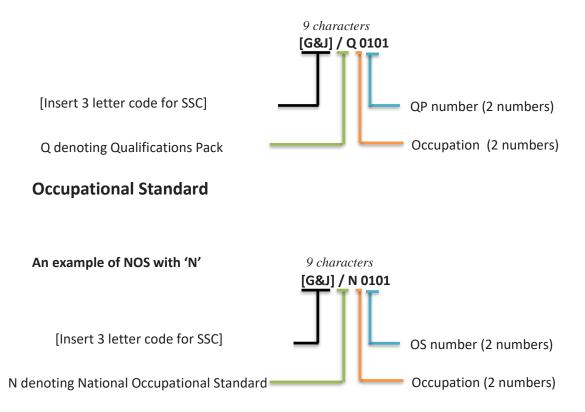


Qualifications Pack for Solderer – Imitation Jewellery

Annexure

Nomenclature for QP and NOS

Qualifications Pack







G&J/Q1401

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

Sub-sector	Range of Occupation numbers
Handmade gold and gems-set	01-11
jewellery	
Imitation Jewellery	12-20
Cast and diamond-set jewellery	21-40
Diamond processing	41-60
Gemstone processing	61-80
Jewellery retailing	81-90
Silver Smithing	91-98
Common	99

Sequence	Description	Example
Three letters	Industry name	G&J
Slash	/	/
Next letter	Whether QP or NOS	Ν
Next two numbers	Occupation code	01
Next two numbers	OS number	01



Criteria For Assessment Of Trainees

<u>Job Role</u> Solderer – Imitation Jewellery <u>Qualification Pack</u> G&J/Q1401 <u>Sector Skill Council</u> Gem & Jewellery

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 50% 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: 100			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
1. G&J/N1401 Soldering imitation jewellery pieces and accessories	PC1. Collect jewellery pieces and inspect for any imperfections or defects such as broken parts, excess metal etc.	60	5	0	5
	PC2. Check and identify the area to be soldered		5	0	5
	PC3. Prepare metal and add flux		5	2	3
	PC4. Torch the metal and quench it		10	5	5
	PC5. Handle soldering iron carefully		3	0	3
	PC6. Minimize damage to the product while working		3	0	3
	PC7. Align and weld the component part or assembly at the precise location		5	0	5
	PC8. Deliver jewellery pieces/ accessories to next process timely		5	0	4
	PC9. Deliver defect free and evenly set jewellery pieces/ accessories		4	0	4





Compulsory NOS Total Marks: 100			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC10. Deliver maximum number of Quality Control certified pieces/ accessories		5	1	4
	PC11. Rework on the product returned from QC		5	1	4
	PC12. Deliver complete jewellery/ accessories on time by reporting problems faced or anticipated well in advance		5	1	5
	Total		60	10	50

Compulsory NOS Total Marks: 100			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
2. G&J/N9904 Coordinate with co-workers	PC1. Understand the work output requirements and work accordingly	20	5	1	4
	PC2. Comply with company policy end rules and work accordingly		5	1	4
	PC3. Deliver quality work on time as required by reporting any anticipated reasons for delay		3	1	2
	PC4. Put team over individual goals and work with team		3	1	2
	PC5. Resolve conflicts and multi- task		4	1	3
	Total		20	5	15

Compulsory NOS Total Marks: 100				Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
3. G&J/N9905 Maintain safe work environment	PC1. Spot and report potential hazards on time	20	2	1	1





Compulsory NOS Total Marks: 100			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC2. Follow company policy and rules regarding use of hazardous materials while working		2	0	2
	PC3. Attend and actively participate in the health and safety campaigns organised by the company		2	1	1
	PC4. Follow process flow improvements that can reduce anticipated or repetitive hazards		2	0	2
	PC5. Stay away from electrical problems that could result in accident		2	0	2
	PC6. Understand which safety gear must be used for a particular task and use it accordingly		2	0	2
	PC7. Attend fire drills organised by the company or industrial zone		2	1	1
	PC8. Learn to use first aid procedure		2	0	2
	PC9. Be alert about designated assembly area in the event of an emergency and use when required		2	0	2
	PC10. Understand and follow the evacuation procedure properly during a fire		2	1	1
	Total		20	4	16