



Model Curriculum

Iron & Steel - Machinist

SECTOR: IRON & STEEL
**SUB-SECTOR: STEEL, SPONGE – IRON, FERRO ALLOYS,
RE ROLLERS, REFRACTORY**
OCCUPATION: MECHANICAL MAINTENANCE
REF ID: ISC/Q0909
NSQF LEVEL: 3



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

INDIAN IRON AND STEEL SECTOR SKILL COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Iron & Steel – Machinist' QP No. 'ISC/Qogog NSQF Level 3'

Date of Issuance: December 22nd, 2015

Valid up to: December 21st, 2016

* Valid up to the next review date of the Qualification Pack


Authorised Signatory
(Indian Iron and Steel Sector Skill Council)



TABLE OF CONTENTS

1. Curriculum	04
2. Trainer Prerequisites	08
3. Annexure: Assessment Criteria	09

Iron & Steel- Machinist

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Machinist”, in the “Iron & Steel” Sector/Industry and aims at building the following key competencies amongst the learner.

Program Name	Iron & Steel - Machinist		
Qualification Pack Name & Reference ID.	Iron & Steel - Machinist ISC/Q0909		
Version No.	1.0	Version Update Date	30-12-2015
Pre-requisites to Training	Minimum qualification – 12th Pass		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> Understand design requirement and prepare equipment Perform fabrication activities Perform post - fabrication activities Perform maintenance activities Carry out housekeeping Carry out reporting and documentation Carry out quality checks Carry out problem identification and escalation Use basic health and safety practices at the work place Works effectively with others 		

This course encompasses 10 out of 10 National Occupational Standards (NOS) of “Iron & Steel - Machinist” Qualification Pack issued by “Indian Iron & Steel Sector Skill Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Over view of Iron & Steel Industry Theory Duration (hh:mm) 04:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code	<ul style="list-style-type: none"> Understanding of Iron & steel industry Understanding various types of Iron & Steel Industry Creating of products of Iron & Steel industry Activities in Iron & Steel Industry 	PPTs of Iron and steel manufacturing, Charts showing the same
2	Occupational, Health and Safety (OHAS) Theory Duration (hh:mm) 08:00 Practical Duration	<ul style="list-style-type: none"> Learn Occupational health & Safety What is hazard Documentation for Health and safety Working at Heights, confined spaces Training on fire and what are remedies & prevention for fire 	PPTs for OHAS related to Job Role, Display Material for PPEs related to Job Role, Safety Material.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 03:00 Corresponding NOS Code ISC/N0008		Type of Safety Sign, First Aid Box, Step Ladder, Sample Accident reports ,Fire Extinguishers, Items required for fire extinguisher and fire Safety
3	5S & House keeping Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 18:00 Corresponding NOS Code ISC/N0008, ISC/N0009	<ul style="list-style-type: none"> • Identification of bottlenecks in functioning of work place • Various methods of housekeeping both pre-work & post-work as well 	PPTs, Display Charts, Audit Checklists
4	Understand design requirement and prepare equipment Theory Duration (hh:mm) 23:00 Practical Duration (hh:mm) 50:00 Corresponding NOS Code CSC/N0901 ISC/N0008, ISC/N0009	<ul style="list-style-type: none"> • Understand design requirement and sequence of operation by interpreting the drawing • Prepare fabrication/machining equipment • Identify tools and moulds for machining • Material Preparation • Ensuring the shop floor house keeping 	Machine drawings, work instructions, Hand tools for Machining, measuring instruments & precision measuring instruments
5	Perform Fabrication Operations Duration (hh:mm) 20:00 Practical Duration (hh:mm) 100:00 Corresponding NOS Code CSC/N0902, ISC/N0008, ISC/N0009	<ul style="list-style-type: none"> • Health and safety procedures • Fire safety procedures • Emergencies, rescue and first aid procedures 	Machine drawings, work instructions, Machine accessories, measuring instruments & precision measuring instruments

Sr. No.	Module	Key Learning Outcomes	Equipment Required
6	Perform post - fabrication activities Theory Duration (hh:mm) 12:00 Practical Duration (hh:mm) 32:00 Corresponding NOS Code ISC/N0009	<ul style="list-style-type: none"> Quality check of work pieces Safe disposal of waste material Ensuring the shop floor house keeping 	Measuring instruments & precision measuring instruments, various types of measuring gauges. Housekeeping material
7	Perform maintenance activities Theory Duration (hh:mm) 12:00 Practical Duration (hh:mm) 32:00 Corresponding NOS Code ISC/N0904	<ul style="list-style-type: none"> Perform preventive maintenance of machines Ensuring the shop floor house keeping 	Machining operation SOP, Lubricants and grease etc. Sample maintenance charts
8	Carry out housekeeping Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 08:00 Corresponding NOS Code ISC/N0905	<ul style="list-style-type: none"> Housekeeping activities preparation Carry out housekeeping activities Post housekeeping activities 	Housekeeping material, Cleaning agents etc.
9	Carryout reporting and documentation Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 08:00 Corresponding NOS Code ISC/N0906	<ul style="list-style-type: none"> Reporting data/problems/incidents Documentation Making secured information system 	Sample documents for methodology of documentation done
10	Carry out quality checks	<ul style="list-style-type: none"> Carry out quality checks for problems identification 	Measuring instruments &

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 16:00 Corresponding NOS Code ISC/N0907	<ul style="list-style-type: none"> Take corrective actions Reporting of results 	precision measuring instruments, various types of measuring gauges. Housekeeping material
11	Carry out problem identification and escalation Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code ISC/N0908	<ul style="list-style-type: none"> Identify problems across: Materials Product Equipment's Others Take corrective measures Escalation of unresolved identified problems 	Sample organisation hierarchy, escalation samples etc.
12	Work effectively with others Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 03:00 Corresponding NOS Code ISC/N0009	<ul style="list-style-type: none"> Ensure appropriate communication with superiors, peers and others as applicable at work place Demonstrate appropriate behaviour and etiquette at work place 	Communication skills PPTs, Posters Team management posters
	Total Duration Theory Duration 120:00 Practical Duration 270:00	Unique Equipment Required: <ul style="list-style-type: none"> Sample Drawing for Machining Machine drawings, work instructions, Hand tools for Machining, measuring instruments & precision measuring instruments Assembling tools Lubricant and coolant Material and Equipment for cleaning Sample organisation hierarchy, escalation samples etc. Personal protective Equipment's and clothes ,Different Type of Safety Sign, First Aid Box, Safety instrument and clothing, Step Ladder, Sample Accident reports ,Fire Extinguishers, Items required for fire extinguisher and fire Safety Measuring instruments & precision measuring instruments, various types of measuring gauges. Housekeeping material 	

Grand Total Course Duration: **390Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Indian Iron and Steel Sector Skills Council](#))



Trainer Prerequisites for Job role: “Iron & Steel - Machinist” mapped to Qualification Pack: “ISC/Q0909”.

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ISC/Q0909”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Min ITI Machinist, Diploma Mechanical
4a	Domain Certification	Certified for Job Role: “Iron & Steel- Machinist” mapped to QP: “ISC/Q0909”. Minimum accepted score is 80%
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/1402”. Minimum accepted score is 80%
5	Experience	Min. 5 years industry experience and minimum 2 years’ experience as Trained or un trained for same Job Role/ Trade



Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Iron & Steel – Machinist
Qualification Pack	ISC/Q0909
Sector Skill Council	Indian Iron & Steel Sector Skill Council

Sr. No.	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 centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
5	To pass the Qualification Pack, every trainee should score a minimum of 60% in every NOS.
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.

Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
ISC/N0901: Understand design requirement and prepare equipment	PC1. Receive sample parts/ blueprints/ engineering drawings and other engineering information as per company procedures	200	5	0	5
	PC2. Analyze sample parts, engineering drawings and blueprints to plan sequence of operations for fabricating various components		10	5	5
	PC3. Report and rectify cases of inappropriate information in design documents as per organizational procedures		5	0	5
	PC4. Compute dimensions, sizes, shapes and tolerances of sub-assemblies of the machine based on specifications as per company procedures		10	5	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC5. Identify and select machines required for fabrication of various components based on design and blueprints		10	5	5
	PC6. Identify and select tools for fabrication of components based on design and blueprints		10	5	5
	PC7. Identify and select moulds and dies for fabrication of components		10	5	5
	PC8. Identify and select lifting and rigging equipment based on design and blueprints		10	5	5
	PC9. Select appropriate metals to be used for fabrication based on design and blueprints		10	5	5
	PC10. Ensure that equipment is clean		5	0	5
	PC11. Ensure machines such as lathes, milling machines and grinders required during fabrication process are ready for operation		10	5	5
	PC12. Set parameters for conventional or computer numerically controlled machines as per design requirements		10	5	5
	PC13. Collect tools required during the fabrication process		5	0	5
	PC14. Ensure that tools match the desired specifications		5	0	5
	PC15. Ensure tools and attachments required during fabrication process are free from physical damage and ready for operation		5	0	5
	PC16. Ensure the calibration status of all measuring equipment and instruments		10	5	5
	PC17. Ensure that no delays are caused as a result of improper preparation and failure to identify problems		5	0	5
	PC18. Ensure that metal work pieces and other materials required for fabrication are in the correct quantity		5	0	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC19. Ensure, by visual inspection, that work pieces are of desired quality (free of rust, type of metal, etc)		5	0	5
	PC20. Remove paint, grease, rust, or other contaminants from work piece		5	0	5
	PC21. Smoothen out the metal work piece prior to fabrication by grinding it		5	0	5
	PC22. Measure and mark metal work piece using instruments such as protractors, micrometers, scribes and rulers		10	5	5
	PC23. Ensure that no delays are caused as a result of improper preparation and failure to identify problems		5	0	5
	PC24. Ensure housekeeping and safety in work area		3	0	3
	PC25. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits		1	0	1
	PC26. Ensure use of mask during grinding to avoid inhaling the dust		1	0	1
	PC27. Ensure that the loose and torn clothes are not worn during working hours		5	0	5
	PC28. Ensure using hoist or forklift for lifting heavy materials to avoid physical injury		8	5	3
	PC29. Adhere to all other safety norms (like wearing shoes, gloves, safety goggles, helmets, etc.)		1	0	1
	PC30. Ensure that unpermitted materials such as fuels, paints etc. are removed from the work area		1	0	1
	PC31. Comply with health, safety, environment guidelines, regulations etc. in accordance with organizational SOP		5	0	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC32. Identify any potential health hazards or dangers and escalate to supervisor as per organizational SOP		5	0	5
	NOS Total	Total	200	60	140
ISC/N0902: Perform fabrication activities	PC1. Ensure, by visual inspection, that work pieces are of desired quality (free of rust, type of metal etc.)	175	10	0	10
	PC2. Ensure that each material is in the correct quantity		5	0	5
	PC3. Lift and secure work pieces on surface plates or worktables using hoists, vises, v-blocks or angle plates		10	0	10
	PC4. Perform sawing to cut work pieces to desired shapes and sizes		10	0	10
	PC5. Perform drilling to thread holes in work pieces as per design		15	5	10
	PC6. Place work pieces in the appropriate machine as per design requirement		5	0	5
	PC7. Operate conventional or computer numerically controlled machine tools such as lathes, milling machines and grinders to bore, grind or shape parts to prescribed dimensions and finishes		20	5	15
	PC8. Perform milling to fabricate parts according to precise sizes and shapes		20	5	15
	PC9. Match the quality of output to company's product requirements		15	5	10
	PC10. Meet production quantity targets set for the operation		5	0	5
	PC11. Follow work instructions as laid down by the company		5	0	5
	PC12. Ensure housekeeping and safety in work area		5	0	5
	PC13. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits		5	0	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC14. Ensure use of mask during grinding to avoid inhaling the dust		5	0	5
	PC15. Ensure that the loose and torn clothes are not worn during working hours		5	0	5
	PC16. Ensure safe distance between body and moving parts of the equipment		10	5	5
	PC17. Ensure using hoist or forklift for lifting heavy materials to avoid physical injury		5	0	5
	PC18. Adhere to all other safety norms (like wearing shoes, gloves, safety goggles, helmets, etc.)		5	0	5
	PC19. Ensure that unpermitted materials such as fuels, paints etc are removed from the work area		5	0	5
	PC20. Comply with health, safety, environment guidelines, regulations etc in accordance with organizational SOP		5	0	5
	PC21. Identify any potential health hazards or dangers and escalate to supervisor as per organizational SOP		5	0	5
	NOS Total	Total	175	25	150
ISC/N0903: Perform post - fabrication activities	PC1. Follow work instructions as laid down by the company	125	5	0	5
	PC2. Ensure that equipment is put in a safe condition (shutdown or idle state) on completion of fabrication activities		10	5	5
	PC3. Remove the work pieces as per company procedure		5	0	5
	PC4. Inspect finished parts for smoothness, contour conformity and defects by visual inspection		15	5	10
	PC5. Verify dimensions, alignments and clearance of finished part for conformance to specifications		15	5	10
	PC6. File, grind, shim etc. to make final adjustment		9	0	9



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC7. Dispose off waste material as per waste disposal procedures laid down by the company		1	0	1
	PC8. Carry out disposal of waste material safely		10	5	5
	PC9. Ensure housekeeping and safety in work area		5	0	5
	PC10. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits		5	0	5
	PC11. Ensure use of mask during grinding to avoid inhaling the dust		5	0	5
	PC12. Ensure that the loose and torn clothes are not worn during working hours		5	0	5
	PC13. Ensure safe distance between body and moving parts of the equipment		10	5	5
	PC14. Ensure using hoist or forklift for lifting heavy materials to avoid physical injury		5	0	5
	PC15. Adhere to all other safety norms (like wearing shoes, gloves, safety goggles, helmets, etc.)		5	0	5
	PC16. Ensure that unpermitted materials such as fuels, paints etc are removed from the work area		5	0	5
	PC17. Comply with health, safety, environment guidelines, regulations etc in accordance with organizational SOP		5	0	5
	PC18. Identify any potential health hazards or dangers and escalate to supervisor as per organizational SOP		5	0	5
NOS Total		Total	125	25	100
ISC/N0904: Perform	PC1. Select necessary inspection tools as per the job requirements	50	10	5	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
maintenance activities	PC2. Observe and listen to operating machines or equipment to diagnose machine malfunction and determine need for adjustment or repair		5	0	5
	PC3. Clean and maintain machines, tools and equipment used in fabrication to remove grease, rust, stains, and foreign matter		5	0	5
	PC4. Inspect condition of lubricants of machine in accordance with workplace procedures		10	5	5
	PC5. Make minor adjustment and alignments on loose bolts, belts, drive slacks, guards and covers		10	5	5
	PC6. Replace worn/faulty components or equipment		1	0	1
	PC7. Record all work done and report to supervisor in accordance with the company procedures		7	5	2
	PC8. Ensure housekeeping and safety in work area		1	0	1
	PC9. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits		1	0	1
	PC10. Ensure use of mask during grinding to avoid inhaling the dust		1	0	0
	PC11. Ensure that the loose and torn clothes are not worn during working hours		1	0	0
	PC12. Ensure safe distance between body and moving parts		1	0	0
	PC13. Ensure using hoist or forklift for lifting heavy materials to avoid physical injury		1	0	0
	PC14. Adhere to all other safety norms (like wearing shoes, gloves, safety goggles, helmets, etc.)		1	0	0



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC15. Remove unpermitted materials such as fuels, paints etc from the work area		1	0	0
	PC16. Comply with health, safety, environment guidelines, regulations etc in accordance with organizational SOP		1	0	1
	PC17. Identify any potential health hazards or dangers and escalate to supervisor as per organizational SOP		1	0	1
	NOS Total	Total	50	20	30
ISC/N0905: Carry out housekeeping	PC1. Inspect the area while taking into account various surfaces	50	2	1	1
	PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain		2	1	1
	PC3. Ensure that the cleaning equipment is in proper working condition		2	1	1
	PC4. Select the suitable alternatives for cleaning the areas in case the appropriate		2	1	1
	equipment and materials are not available and inform the appropriate person		2	1	1
	PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces equipment and materials are not available and inform the appropriate person		2	1	1
	PC6. Inform the affected people about the cleaning activity		2	1	1
	PC7. Display the appropriate signage for the work being conducted		3	1	2
	PC8. Ensure that there is adequate ventilation for the work being carried out		3	1	2
	PC9. Wear the personal protective equipment required for the cleaning method and materials being used		2	1	1



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC10. Use the correct cleaning method for the work area, type of soiling and surface		2	1	1
	PC11. Carry out cleaning activity without disturbing others		2	1	1
	PC12. Deal with accidental damage, if any, caused while carrying out the work		2	1	1
	PC13. Report to the appropriate person any difficulties in carrying out your work		2	1	1
	PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill		2	1	1
	PC15. Ensure that there is no oily substance on the floor to avoid slippage		2	1	1
	PC16. Ensure that no scrap material is lying around		4	1	3
	PC17. Maintain and store housekeeping equipment and supplies		4	1	3
	PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process		2	1	1
	PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements		2	1	1
	PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored		2	1	1
	PC21. Dispose the waste garnered from the activity in an appropriate manner		2	1	1
	PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly		2	1	1
	NOS Total	Total	50	22	28
ISC/N0906: Carry out	PC1. Report data/problems/incidents as applicable in a timely manner	50	5	0	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
reporting and documentation	PC2. Report to the appropriate authority as laid down by the company		1	0	1
	PC3. Follow reporting procedures as prescribed by the company		4	0	4
	PC4. Identify documentation to be completed relating to one's role		10	5	5
	PC5. Record details accurately in an appropriate format		5	0	5
	PC6. Complete all documentation within stipulated time according to company procedure		1	0	1
	PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly		4	0	4
	PC8. Make sure documents are available to all appropriate authorities to inspect		5	0	5
	PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures		5	0	5
	PC10. Inform the appropriate authority of requests for information received		10	5	5
	NOS Total	Total	50	10	40
ISC/N0907: Carry out quality checks	PC1. Ensure that total range of checks are regularly and consistently performed	100	5	0	5
	PC2. Use appropriate measuring instruments, equipment, tools, accessories etc, as required		10	5	5
	PC3. Identify non-conformities to quality assurance standards		4	0	4
	PC4. Identify potential causes of non-conformities to quality assurance standards		1	0	1
	PC5. Identify impact on final product due to non-conformance to company standards		10	5	5
	PC6. Evaluating the need for action to ensure that problems do not recur		10	5	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC7. Suggest corrective action to address problem		10	5	5
	PC8. Review effectiveness of corrective action		5	0	5
	PC9. Interpret the results of the operator level quality check correctly		10	5	5
	PC10. Inform any non-conformity to the appropriate authority within the stipulated time		5	0	5
	PC11. Record of results of action taken		5	0	5
	PC12. Record adjustments not covered by established procedures for future reference		5	0	5
	PC13. Review effectiveness of action taken		10	5	5
	PC14. Follow reporting procedures where the cause of defect cannot be identified		10	5	5
	NOS Total	Total	100	35	65
ISC/N0908: Carry out problem identification and escalation	PC1. Identify defects/indicators of problems	50	9	5	4
	PC2. Identify any wrong practices that may lead to problems		2	0	2
	PC3. Identify practices that may impact the final product quality		6	5	1
	PC4. Identify if the problem has occurred before		1	0	1
	PC5. Identify other operations that might be impacted by the problem		1	0	1
	PC6. Ensure that no delays are caused as a result of failure to escalate problems		1	0	1
	PC7. Take appropriate materials and sample to conduct tests		3	0	3
	PC8. Evaluate results to confirm suspected reasons for non-conformance (where required)		1	0	1
	PC9. Consider possible reasons for identification of problems		1	0	1



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC10. Consider applicable corrections and formulate corrective action		3	0	3
	PC11. Formulate action in a timely manner		1	0	1
	PC12. Communicate problem/remedial action to appropriate parties		1	0	1
	PC13. Take corrective action in a timely manner		3	0	3
	PC14. Report/document problem and corrective action in an appropriate manner		3	0	3
	PC15. Monitor corrective action		3	0	3
	PC16. Evaluate implementation of corrective action taken to determine if the problem has been resolved		1	0	1
	PC17. Ensure that corrective action selected is viable and practical		1	0	1
	PC18. Ensure that correct solution is identified to an identified problem		1	0	1
	PC19. Take corrective action for problems identified according to the company procedures		1	0	1
	PC20. Ensure that no delays are caused as a result of failure to take necessary action		1	0	1
	PC21. Escalate problem as per laid down escalation matrix		3	0	3
	PC22. Escalate the problem within stipulated time		1	0	1
	PC23. Escalate the problem in an appropriate manner		1	0	1
	PC24. Ensure that no delays are caused as a result of failure to escalate problems		1	0	1
	NOS Total	Total	50	10	40
ISC/N0008: Use basic health and safety practices at the workplace	PC1. Use protective clothing/equipment for specific tasks and work conditions	150	10	5	5
	PC2. State the name and location of people responsible for health and safety in the workplace		4	0	4



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC3. State the names and location of documents that refer to health and safety in the workplace		1	0	1
	PC4. Identify job-site hazardous work and state possible causes of risk or accident in the workplace		10	5	5
	PC5. Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role		10	5	5
	PC6. State location of general health and safety equipment in the workplace		5	0	5
	PC7. Inspect for faults, set up and safely use steps and ladders in general use		5	0	5
	PC8. Work safely in and around trenches, elevated places and confined areas		4	0	4
	PC9. Lift heavy objects safely using correct procedures		4	0	4
	PC10. Apply good housekeeping practices at all times		1	0	1
	PC11. Identify common hazard signs displayed in various areas		6	5	1
	PC12. Retrieve and/or point out documents that refer to health and safety in the workplace		5	0	5
	PC13. Use the various appropriate fire extinguishers on different types of fires correctly		10	5	5
	PC14. Demonstrate rescue techniques applied during fire hazard		10	5	5
	PC15. Demonstrate good housekeeping in order to prevent fire hazards		1	0	1
	PC16. Demonstrate the correct use of a fire extinguisher		4	0	4
	PC17. Demonstrate how to free a person from electrocution		5	0	5



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC18. Administer appropriate first aid to victims as required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.		10	5	5
	PC19. Demonstrate basic techniques of bandaging		5	0	5
	PC20. Respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments		10	5	5
	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		5	0	5
	PC22. Administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock, before the arrival of emergency services in real or simulated cases		5	0	5
	PC23. Demonstrate the artificial respiration and the CPR Process		5	0	5
	PC24. Participate in emergency procedures		4	0	4
	PC25. Complete a written accident/incident report or dictate a report to another person, and send report to person responsible		10	5	5
	PC26. Demonstrate correct method to move injured people and others during an emergency		1	0	1
	NOS Total	Total	150	45	105
ISC/N0009: Work effectively with others	PC1. Accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	50	6	3	3
	PC2. Accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt		4	2	2



Assessable Outcome	Assessment criteria	Marks Allocated			
		Total Marks	Out Of	Theory	Practical
	PC3. Provide information to others clearly, at a pace and in a manner that helps them to understand		5	0	5
	PC4. Display helpful behaviour by assisting others in performing tasks in a positive manner, where required and possible		6	3	3
	PC5. Consult with and assist others to maximize effectiveness and efficiency in carrying out tasks		4	2	2
	PC6. Display appropriate communication etiquette while working		5	0	5
	PC7. Display active listening skills while interacting with others at work		5	0	5
	PC8. Use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism		6	3	3
	PC9. Demonstrate responsible and disciplined behaviours at the workplace		7	2	5
	PC10. Escalate grievances and problems to supervisor		2	0	2
	NOS Total	Total	50	15	35
	Grand Total	1000	1000	267	733
	Percentage Weightage:			50%	50%
	Minimum Pass% to qualify (aggregate):			60%	