Diploma in Automobiles

Diploma in Automobiles

1 Year Diploma Course
Community College

Document History - Versions			
Sl.No	**Description**	**Version**	**Date**
1	Diploma in Automobiles	1.0	14.11.14
2	Diploma in Automobiles	2.0	25.11.14

Course Focus:

This course is aimed at training candidates for the role of auto service technician. The auto service technician will have the responsibility to service and repair specific vehicles.

By the end of the course the candidate will have the following key competencies:

1. Knowledge on systems of an internal combustion engine
2. Diagnosing problems in vehicles
3. Tools used for repair services
4. SOPs for service and repair
5. Process to repair and service vehicles

Objectives of the Course:

1. Understand the functioning of internal combustion engine systems
2. Implement the process to service and repair of vehicles
3. Efficiently use the tools and equipment for service and repair

Curriculum:

Name of Papers

Vocational Theory Papers

- Introduction to Internal Combustion Engines
- Introduction to Power Transmission and Chassis Controlling Systems
- Introduction to Automotive Electricals
- Vehicle Diagnosis for Repair & Tools and Equipments for Servicing and Painting
- Servicing and Minor Repairs, Routine Works and Planning
- Maintaining Health and Safety in Work Environment

Vocational Practical Papers

- Practical Paper 1 (based on Introduction to Internal Combustion Engines Introduction to Power Transmission and Chassis Controlling Systems and Introduction to Automotive Electricals)
- Practical Paper 2 (Vehicle Diagnosis for Repair & Tools and Equipments for Servicing and Painting, Servicing and Minor Repairs, Routine Works and Planning and Maintaining Health and Safety in Work Environment)

General Papers

- Communication Skills
- Life Skills

Additional Papers

- Internship 1
- Internship 2
- Self-Learning/ ELearning/GD/Seminars
- Study Trip/Library/ELearning

Semester-wise Break up:

Semester	Paper No.	Paper Name	Credits
1	1	Introduction to Internal Combustion Engines	3
	2	Introduction to Power Transmission and Chassis Controlling Systems	3
	3	Introduction to Automotive Electricals	3
	4	Communication Skills	3
	5	Practical Paper 1	6
	6	Self-Learning/ ELearning/GD/Seminars	4
	7	Internship 1	8
2	8	Vehicle Diagnosis for Repair & Tools and Equipments for Servicing and Painting	3
	9	Servicing and Minor Repairs, Routine Works and Planning	3
	10	Maintaining Health and Safety in Work Environment	3
	11	Life Skills	3
	12	Practical Paper 2	6
	13	Study Trip/Library/ELearning	4
	14	Internship 2	8
Total			**60**

Theory Syllabus:

Paper Name	Topics Covered	Key Outcomes	Credits
Introduction to Internal Combustion Engines	Introduction	Fundamental understanding of the working of an engine and the different components of an engine.	3
	Working of Engine: Purpose of engine; introduction of external combustion engine and internal combustion engine; working of 4-stroke petrol engine and 4-stroke diesel engine; Valve Timing Diagrams (actual and theoretical); comparison between petrol and diesel engine; 2-stroke petrol engine; Port Timing Diagram; comparison between 4-stroke and 2-stroke engines; description of displacement volume and its unit (c.c.), clearance volume, I.H.P., B.H.P., F.H.P.; units of power (H.P., PS)		
	Engine Cooling System: Purposes of engine cooling system, types of engine cooling system, description of air cooling system and water cooling system, different components of engine cooling system (including cooling fins, radiator, thermostat, water pump, pressure cap); antifreeze solution.		
	Engine Lubricating System: Purposes of engine lubricating system; qualities of good engine lubricant; types and description of engine lubricating systems (petrol system, splash system, pressure system, semi-pressure system, dry sump system); main components of engine lubricating system (including oil pumps, oil filters, oil chamber); description of blow-by, crankcase-dilution, crankcase ventilation.		
	Fuel Supply System: Purpose of fuel supply system; qualities of a good fuel. Petrol Engine Fuel Supply System: Types of fuel supply system, main components (including fuel tank, carburettor, fuel pump, fuel filter, air cleaner, intake manifold, exhaust manifold); M.P.F.I. (purpose and types); description of Electronic type M.P.F.I.		
	Diesel Engine Fuel Supply System: Types of fuel supply system, main components (including feed pump, fuel injection pump, injectors); direct injection type, indirect injection type, common rail type injection system.		
	Automobile Emission and its Control: Complete and incomplete combustion; constituents of exhaust (hydrocarbon, carbon monoxide, oxide of nitrogen, smokes); pollutant formation (CO, NOx, SO2, HC, lead, soot); effect of air-fuel ratio on exhaust emission; effect of driving mode on exhaust emission; sources of pollutants in an automobile (fuel tank, and carburettor emission, crankcase emission, tail pipe emission); control approaches for automobile emission (positive crankcase ventilation, fuel vapour emission control, EGR, air injection system, catalytic converter).		

Introduction to Power Transmission and Chassis Controlling Systems	Introduction	Functional knowledge of the working of an engine including Power Transmission and Chassis Controlling Systems	3
	Automobile: Definition of the term' Automobile'; explanation of the term automobile; examples of the automobile; definition and the explanation of the term 'self-propelled vehicle'.		
	Clutch: Purpose of clutch; types of clutch; working principle of friction clutch; qualities of a good clutch; description of single plate type clutch, and multi-plate type clutch and diaphragm spring type clutch; description of clutch components (including clutch plates, pressure plate); clutch free pedal play		
	Gear Box (Transmission): Different resistances to a vehicle in motion; purpose of gear box; fundamentals of gears; different methods of power transmission from gear box to the road wheels; types of gear box, description of sliding mesh type gear box, constant mesh type gear box and synchromesh type gear box; purpose and description of transfer gear box; introduction of epicyclic gear box		
	Propeller Shaft Assembly: Purpose of propeller shaft assembly and description of its main components (including propeller shaft, universal joints and slip joint)		
	Final Drive-cum-Differential: Purpose and types of final drive; description of types of final drive; purpose and description of differential		
	Chassis Frame: Function of chassis frame; loads on the frame; frame construction, sub-frame, defects in frame; frameless construction		
	Suspension System: Purpose of suspension system; purpose of spring and shock absorber; types of suspension springs; types of steel springs; description of semi-elliptical leaf spring suspension system; helper spring; coil spring; shock absorber; description of hydraulic shock absorber; purpose of anti-roll bar (stabiliser bar); independent suspension system; purpose and types of independent suspension system; double wishbone type and Mc. Pherson Strut type front independent suspension system; description of air springs and air suspension system		
	Front Axle and Steering System: Front axle assembly; Front Axle beam; stub axle and its types; king pin; purpose of steering system; steering layout of four wheeler, steering gear box; purpose and types of power steering; steering geometry (including camber angle, king pin inclination, included angle, castor, toe-in, toe-out, wheel base, wheel track), fundamental equation of correct steering; Ackermann's Mechanism of steering; wheel alignment; safety in steering		

	Braking System: Purpose of braking system; types of brakes; description of mechanical brake, hydraulic brake (also description of master cylinder and wheel cylinder), air brake, drum brake, disc brake; power brake Braking System: Purpose of braking system; types of brakes; description of mechanical brake, hydraulic brake (also description of master cylinder and wheel cylinder), air brake, drum brake, disc brake; power brake		
Introduction to Automotive Electricals	Introduction Fundamentals of Electricity: Electrostatic Potential, Potential difference, Electric Current, Ohm's Law, Electrical Resistance, series connection, parallel connection, conductors, insulators, semi-conductors, diode, triode, introduction of magnets. Ignition System: Purpose of ignition system; requirement of a good ignition system; types of ignition system; description of Battery ignition system; description of Magneto ignition system; description of electronic ignition system; description (including purpose, construction and types) of components of ignition system (including ignition coil, condenser, contact breaker points, distributor); ignition advance and types of ignition advance mechanisms; vacuum advance mechanism and centrifugal advance mechanism; description, construction and types of spark plug Electric Generators: Purpose of electric generator; DC generator (dynamo); principle, working and construction of a dynamo; Fleming's Right Hand Rule; main components of dynamo (including yoke body, armature shaft assembly, commutator, carbon brushes, field coils); regulators for DC generator (including cut out relay, current regulator, voltage regulator); AC generator (alternator); working and construction of an alternator; main components of alternator (frame or housing, rotor, slip rings and brushes, stator) Battery: Function of battery; types of battery, description of a Lead Acid battery, components of a lead acid battery (including container, positive and negative plates, grid, cell covers); electrolyte; working of lead acid battery, chemical equations during charging and discharging of a lead acid battery; cell voltage; battery capacity; battery rating; battery charging (need for recharging, checking the state of charge and procedure of charging); slow rate and quick rate charging; specific gravity; battery testing (different methods); hydrometer; battery maintenance; precautions during handling of a battery	Knowledge of the functioning of the electrical components of an engine	3

	Starting System: Purpose of starting system; different methods of cranking the engines; principle of an electric motor; Fleming's Left Hand Rule; constructional details of a self-starter motor; drive arrangement and its types; Inertia drive (Bendix drive and Folo-thru drive) and over running clutch Wiring, Lighting and Accessories: Wiring circuits; single wiring system and double wiring system; different lights and indicators; wiper, horn, E.C.U., Air Conditioning		
Vehicle Diagnosis for Repair & Tools and Equipments for Servicing and Painting	Vehicle Diagnosis for Repair: - Standard operating procedures for using workshop tools and equipment for diagnosis - Standard operating procedures for diagnosing faults - Checklists and Standard OEM Operating Procedures - Steps to dismantle and assemble parts - Reporting malfunctions or repair requirements observed in vehicles - Precautions to be taken to avoid damage to the vehicle and its components	Knowledge of the SOPs and checklists for diagnosing the faults in vehicles, tools used for servicing.	3
	The Tools used for servicing: - Pressure indicators: fuel pressure testers, manifold gauge sets, oil pressure gauges, tire pressure gauges, etc. - Pullers: ball joint separators, bearing pullers, gear puller tools, slide hammer, etc. - Specialty wrenches: alignment wrenches, chain wrenches, locking wrenches, lug wrenches, etc. - Trim or moulding tools: carbon scrapers, gasket scrapers, scrapers, spoons - Measuring equipment: cornier callipers , feeler gauges, multimeters, flow meter, temp gauge, dial gauge, etc.		
	Sources of information for assessing service and repair requirements: - Diagnostic displays - Visual inspections - Test drives - Vehicle/equipment manufacturer specifications - Standard operating procedures		
	Painting: Definition of painting; objectives of painting; elements of paint-pigment, resin, solvent, thinner; classification of paints-undercoat paint, primer surfacer, second coat paint, sealer, top coat paint; painting methods; spraying; spray painting equipments; defects occurring during painting and immediately after painting		

Servicing and Minor Repairs, Routine Works and Planning	Auto component manufacturer specification related to the various components in the vehicle Conduct test drives to assess need for repairs, calibration Calibrating, Aligning and Setting Engine Parts, including: - Engine and aggregates - Other engine sub-assemblies like turbocharger, radiator etc. - Gear box and its aggregates - Propeller shafts and other transmission systems - Clutch and brake systems and sub-assemblies - Chassis - Electrical and electronic components - Steering systems - Suspension system - Other components (including valves, ignition, fuel and emissions, transmission, lights, tyres, steering and body fittings)	Knowledge about the different repairs to be conducted on vehicles	3
	Components that needs to changed, including: - Oil and air filters - Belts - Wiper blades - Brake linings and pads - Drive		
	Procedures and Checklist for Routine Service Recording all service and repairs carried out Maintaining workshop tools and equipments		
	Basic Driving Skills - Driving Requirements-Critical situation - General Durability Testing - Performance testing		
	Organisation's policies, procedures and priorities for area of work, role and responsibilities Prioritizing workload		
	Working with a team: - Interacting with team members - Cooperating with other teams - Supporting and guiding team activities Communication with team mates and superior Providing right information to the colleagues		
Maintaining Health and Safety in Work Environment	Norms & government policies for emergency procedures in work environment	Steps to maintain a safe and healthy work atmosphere	3
	Resources needed to maintain a safe working environment		
	Organisation's current health, safety and security policies and procedures		
	Types of breaches in health, safety and security		

Practical Syllabus:

Paper Name	Topics Covered	Credits
Practical Paper 1	Display and explanation of functions of different engine parts, Automotive Electricals, Power Transmission system and chassis controlling system	6
	Standard Operating Procedures for using workshop tools	
	Steps to dismantled and assemble parts	
	Using proper tools for routine service and repair	
	Process to report the diagnosis	
	Workshop visits	
	Hands on experience in repair	
Practical Paper 2	Calibrating, Aligning and setting engine parts, power transmission parts, chassis controlling parts and automotive electrical parts	6
	Implementing the procedure to service a vehicle and documenting the issues	
	Following Procedures and Checklist for Routine Service	
	Workshop visits	
	Hands on experience in routine servicing	

General Papers Syllabus:

Paper Name	Topics Covered	Key Outcomes	Credits
Communication Skills	**Communication: What is it?**	Basics of Communication	3
	Purpose of Communication		
	Elements of Communication		
	Communication Types: Verbal and Non Verbal		
	Principles of Communication		
	Effective Communication	Guidelines for effective communication	
	Guidelines for Effective Communication		
	Barriers in Effective Communication		
	Listening Skills: - Listening and Understanding - Traits of a good or bad Listener		
	Speaking Skills	Skills for improving speaking skills in a work environment	
	Definition		
	Components: - Punctuation - Articulation		
	Public Speaking		
	Knowing What You Want To Say		
	Speaking to Team mates		
	Telephone etiquette		

	Reading Skills	Importance of reading in communication	
	Definition of Reading		
	Levels of Reading		
	Requirements of Reading		
	Techniques of Reading		
	Writing Skills	Skills for improving written communication skills in a work environment	
	Writing and Expressing		
	Sentences and Phrases		
	Parts of Speech		
	Use of Articles		
	Constructing Meaningful Sentences		
	Writing Emails		
	Team Communication	Skills to communicate between team members during a discussion	
	Group Participation		
	Formal and Informal Groups		
	Open and Closed Groups		
	Influences on group performance		
	Guidelines for group discussion		
	Adopting an Open Attitude		
	Presentation Skills	Skills to improve presentation skills in the work environment	
	Making Effective Presentations		
	Analysing audience and locale		
	Organizing content and preparing an outline		

Paper Name	Topics Covered	Key Outcomes	Credits
Life Skills	**Self-Awareness:** - Recognition of Self-character - Self-confidence - Self-worth - Self-esteem - Self-development - Self-assessment	Skills for self-awareness	3
	Empathy and its Importance: - Importance of relationship - Understanding ourselves and others - Effective communication for good relationship - Presentation of thoughts and ideas - Tackling issues and need fulfilment - Learning and respecting value system	Understanding the importance of empathy and its use in a work environment	

Manners: - Importance of Good manners - Greetings - Introducing people - Talking etiquette	Awareness and importance of good manners
Decision Making: - Analyzing Information - Constructive Decision Making - Action for Decision Making	Skills to take decisions in a work environment
Problem Solving: - Identifying Problems - Analysing - Prioritizing - Solving Problem	Steps to solve wor related problems
Creative Thinking: - Generating new ideas - Flexible Perspective	Understanding the concept of creative thinking
Work Ethics : - Punctuality - Dependability - Efficiency - Discipline	Importance of work ethics
Stress and Time Management: - Recognizing the sources of Stress - Effects of Stress - Managing Stress - Importance of Time Management	Skills to manage stress. Steps for effective time management
Coping with Emotions: - Influence of Emotion on Behaviour - Self-motivation and Self-satisfaction - Coping with Anger - Coping with Fear	Understanding the importance of coping with emotions in work environment

Topic Mapping with QP-NOS -Auto Service Technician Level 4

Paper Name	Topics Covered	NOS Mapping
Introduction to Internal Combustion Engines	Introduction	ASC/ N 1402: Assist in performing diagnosis of vehicle for repair requirements
	Working of Engine: Purpose of engine; introduction of external combustion engine and internal combustion engine; working of 4-stroke petrol engine and 4-stroke diesel engine; Valve Timing Diagrams (actual and theoretical); comparison between petrol and diesel engine; 2-stroke petrol engine; Port Timing Diagram; comparison between 4-stroke and 2-stroke engines; description of displacement volume and its unit (c.c.), clearance volume, I.H.P., B.H.P., F.H.P.; units of power (H.P., PS)	
	Engine Cooling System: Purposes of engine cooling system, types of engine cooling system, description of air cooling system and water cooling system, different components of engine cooling system (including cooling fins, radiator, thermostat, water pump, pressure cap); antifreeze solution.	
	Engine Lubricating System: Purposes of engine lubricating system; qualities of good engine lubricant; types and description of engine lubricating systems (petrol system, splash system, pressure system, semi-pressure system, dry sump system); main components of engine lubricating system (including oil pumps, oil filters, oil chamber); description of blow-by, crankcase-dilution, crankcase ventilation.	
	Fuel Supply System: Purpose of fuel supply system; qualities of a good fuel. Petrol Engine Fuel Supply System: Types of fuel supply system, main components (including fuel tank, carburettor, fuel pump, fuel filter, air cleaner, intake manifold, exhaust manifold); M.P.F.I. (purpose and types); description of Electronic type M.P.F.I.	
	Diesel Engine Fuel Supply System: Types of fuel supply system, main components (including feed pump, fuel injection pump, injectors); direct injection type, indirect injection type, common rail type injection system.	

	Automobile Emission and its Control: Complete and incomplete combustion; constituents of exhaust (hydrocarbon, carbon monoxide, oxide of nitrogen, smokes); pollutant formation (CO, NOx, SO2, HC, lead, soot); effect of air-fuel ratio on exhaust emission; effect of driving mode on exhaust emission; sources of pollutants in an automobile (fuel tank, and carburettor emission, crankcase emission, tail pipe emission); control approaches for automobile emission (positive crankcase ventilation, fuel vapour emission control, EGR, air injection system, catalytic converter).	
Introduction to Power Transmission and Chassis Controlling Systems	Introduction	ASC/ N 1402: Assist in performing diagnosis of vehicle for repair requirements
	Automobile: Definition of the term' Automobile'; explanation of the term automobile; examples of the automobile; definition and the explanation of the term 'self-propelled vehicle'.	
	Clutch: Purpose of clutch; types of clutch; working principle of friction clutch; qualities of a good clutch; description of single plate type clutch, and multi-plate type clutch and diaphragm spring type clutch; description of clutch components (including clutch plates, pressure plate); clutch free pedal play	
	Gear Box (Transmission): Different resistances to a vehicle in motion; purpose of gear box; fundamentals of gears; different methods of power transmission from gear box to the road wheels; types of gear box, description of sliding mesh type gear box, constant mesh type gear box and synchromesh type gear box; purpose and description of transfer gear box; introduction of epicyclic gear box	
	Propeller Shaft Assembly: Purpose of propeller shaft assembly and description of its main components (including propeller shaft, universal joints and slip joint)	
	Final Drive-cum-Differential: Purpose and types of final drive; description of types of final drive; purpose and description of differential	
	Chassis Frame: Function of chassis frame; loads on the frame; frame construction, sub-frame, defects in frame; frameless construction	

	Suspension System: Purpose of suspension system; purpose of spring and shock absorber; types of suspension springs; types of steel springs; description of semi-elliptical leaf spring suspension system; helper spring; coil spring; shock absorber; description of hydraulic shock absorber; purpose of anti-roll bar (stabiliser bar); independent suspension system; purpose and types of independent suspension system; double wishbone type and Mc. Pherson Strut type front independent suspension system; description of air springs and air suspension system	
	Front Axle and Steering System: Front axle assembly; Front Axle beam; stub axle and its types; king pin; purpose of steering system; steering layout of four wheeler, steering gear box; purpose and types of power steering; steering geometry (including camber angle, king pin inclination, included angle, castor, toe-in, toe-out, wheel base, wheel track), fundamental equation of correct steering; Ackermann's Mechanism of steering; wheel alignment; safety in steering	
	Braking System: Purpose of braking system; types of brakes; description of mechanical brake, hydraulic brake (also description of master cylinder and wheel cylinder), air brake, drum brake, disc brake; power brake Braking System: Purpose of braking system; types of brakes; description of mechanical brake, hydraulic brake (also description of master cylinder and wheel cylinder), air brake, drum brake, disc brake; power brake	
Introduction to Automotive Electricals	Introduction Fundamentals of Electricity: Electrostatic Potential, Potential difference, Electric Current, Ohm's Law, Electrical Resistance, series connection, parallel connection, conductors, insulators, semi-conductors, diode, triode, introduction of magnets.	

Ignition System: Purpose of ignition system; requirement of a good ignition system; types of ignition system; description of Battery ignition system; description of Magneto ignition system; description of electronic ignition system; description (including purpose, construction and types) of components of ignition system (including ignition coil, condenser, contact breaker points, distributor); ignition advance and types of ignition advance mechanisms; vacuum advance mechanism and centrifugal advance mechanism; description, construction and types of spark plug

Electric Generators: Purpose of electric generator; DC generator (dynamo); principle, working and construction of a dynamo; Fleming's Right Hand Rule; main components of dynamo (including yoke body, armature shaft assembly, commutator, carbon brushes, field coils); regulators for DC generator (including cut out relay, current regulator, voltage regulator); AC generator (alternator); working and construction of an alternator; main components of alternator (frame or housing, rotor, slip rings and brushes, stator)

Battery: Function of battery; types of battery, description of a Lead Acid battery, components of a lead acid battery (including container, positive and negative plates, grid, cell covers); electrolyte; working of lead acid battery, chemical equations during charging and discharging of a lead acid battery; cell voltage; battery capacity; battery rating; battery charging (need for recharging, checking the state of charge and procedure of charging); slow rate and quick rate charging; specific gravity; battery testing (different methods); hydrometer; battery maintenance; precautions during handling of a battery

Starting System: Purpose of starting system; different methods of cranking the engines; principle of an electric motor; Fleming's Left Hand Rule; constructional details of a self-starter motor; drive arrangement and its types; Inertia drive (Bendix drive and Folo-thru drive) and over running clutch

	Wiring, Lighting and Accessories: Wiring circuits; single wiring system and double wiring system; different lights and indicators; wiper, horn, E.C.U., Air Conditioning	
Vehicle Diagnosis for Repair & Tools and Equipments for Servicing, Painting	Vehicle Diagnosis for Repair: - Standard operating procedures for using workshop tools and equipment for diagnosis - Standard operating procedures for diagnosing faults - Checklists and Standard OEM Operating Procedures - Steps to dismantle and assemble parts - Reporting malfunctions or repair requirements observed in vehicles - Precautions to be taken to avoid damage to the vehicle and its components	ASC/ N 1403: Carry out routine service and minor repairs of mechanical& electrical aggregates
	The Tools used for servicing: - Pressure indicators: fuel pressure testers, manifold gauge sets, oil pressure gauges, tire pressure gauges, etc. - Pullers: ball joint separators, bearing pullers, gear puller tools, slide hammer, etc. - Specialty wrenches: alignment wrenches, chain wrenches, locking wrenches, lug wrenches, etc. - Trim or moulding tools: carbon scrapers, gasket scrapers, scrapers, spoons - Measuring equipment: cornier callipers, feeler gauges, multimeters, flow meter, temp gauge, dial gauge, etc.	
	Sources of information for assessing service and repair requirements: - Diagnostic displays - Visual inspections - Test drives - Vehicle/equipment manufacturer specifications - Standard operating procedures	
	Painting: Definition of painting; objectives of painting; elements of paint-pigment, resin, solvent, thinner; classification of paints-undercoat paint, primer surfacer, second coat paint, sealer, top coat paint; painting methods; spraying; spray painting equipments; defects occurring during painting and immediately after painting	

Servicing and Minor Repairs, Routine Works and Planning	Auto component manufacturer specification related to the various components in the vehicle Conduct test drives to assess need for repairs, calibration Calibrating, Aligning and Setting Engine Parts, including: - Engine and aggregates - Other engine sub-assemblies like turbocharger, radiator etc. - Gear box and its aggregates - Propeller shafts and other transmission systems - Clutch and brake systems and sub-assemblies - Chassis - Electrical and electronic components - Steering systems - Suspension system - Other components (including valves, ignition, fuel and emissions, transmission, lights, tyres, steering and body fittings)	ASC/ N 0001: Plan and organise work to meet expected outcomes ASC/ N 0002: Work effectively in a team
	Components that needs to changed, including: - Oil and air filters - Belts - Wiper blades - Brake linings and pads - Drive	
	Procedures and Checklist for Routine Service Recording all service and repairs carried out Maintaining workshop tools and equipments	
	Basic Driving Skills - Driving Requirements-Critical situation - General Durability Testing - Performance testing	
	Organisation's policies, procedures and priorities for area of work, role and responsibilities Prioritizing workload	
	Working with a team: - Interacting with team members - Cooperating with other teams - Supporting and guiding team activities Communication with team mates and superior Providing right information to the colleagues	
Maintaining Health and	Norms & government policies for emergency procedures in work environment	ASC/ N 0003: Maintain a healthy, safe and

Safety in Work Environment	Resources needed to maintain a safe working environment	secure working environment
	Organisation's current health, safety and security policies and procedures	
	Types of breaches in health, safety and security	