



EXAM COUNSELING SHEETS

for

PROVINCIAL AND LEVEL EXAMS

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EXAM COUNSELLING SHEETS FOR PROVINCIAL & LEVEL EXAMS

Each counselling sheet contains a column entitled “Percentage of Questions on Exam”, which lists the average percentage of multiple-choice items found in each section. Provincial and Level exams typically contain 100 to 150 items. For Red Seal exam counselling sheets, please see the Red Seal website:

www.red-seal.ca

Note:

- Please click on your trade/level below to go to the exam counselling sheet.
- For the trade-levels in **RED** below, apprentices must pass the Level Exam at the end of their level of training in order to progress.

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AGRICULTURAL EQUIPMENT TECHNICIAN

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5
2	Tools and Equipment	4
3	Hoisting and Lifting	2
4	Communication and Documentation	1
5	Preventive Maintenance	2
6	Start, Move and Park Vehicle	2
7	Fasteners, Tubings, Hoses and Fittings	2
8	Lubrication and Fluids Servicing	4
9	Gaskets, Seals and Sealing Compounds	2
10	Bearings	3
11	Metallurgy	1
12	Cutting and Heating	2
13	Metal Inert Gas (MIG) Welding	2
14	Tires, Rims, Wheels and Hubs	6
15	Engine Principles	8
16	Electrical and Electronic Principles	10
17	Batteries	2
18	Lighting Circuits	2
19	Wiring Harnesses and Accessories	6
20	Introduction to Hydraulics	8
21	Hydraulic Fittings, Piping, Tubing and Hoses	3
22	Hydraulic Reservoirs, Coolers and Filters	3
23	Hydraulic Brake Systems I	6
24	Introduction to Air Brake Systems	7
25	Ozone Depleting Substances	1
26	Shielded Metal Arc Welding (SMAW)	2
27	Introduction to Steering System Components	4
	TOTAL:	100%

Date: June 2020

ALARM AND SECURITY TECHNICIAN

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Basic Work Practices and Procedures	25%
2	Installation of Security Systems	38%
3	Service, Maintenance and Repair of Security Systems	17%
4	Canadian Electrical Code (CEC)	20%
	TOTAL:	100%

Date: 2015

AUTO BODY AND COLLISION TECHNICIAN

Level 1

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Shop and Safety	32%
	<i>Topics:</i>	
	<i>Safety</i>	8%
	<i>Trade Related Documents</i>	4%
	<i>Tools and Equipment</i>	9%
	<i>Fasteners and Adhesives</i>	6%
	<i>Batteries</i>	5%
2	Auto Body Welding	14%
	<i>Topics:</i>	
	<i>Cutting and Heating</i>	4%
	<i>Gas Metal Arc Welding (GMAW)</i>	10%
3	Vehicle Construction	13%
	<i>Topics:</i>	
	<i>Vehicle Construction</i>	11%
	<i>Upholstery, Trim and Hardware</i>	2%
4	Metal Working	17%
	<i>Topics:</i>	
	<i>Metallurgy</i>	14%
	<i>Metal Working I (Mild Steel)</i>	3%
5	Auto Body Preparation	24%
	<i>Topics:</i>	
	<i>Body Filler and Abrasives</i>	5%
	<i>Surface Preparation (Cleaning, Stripping and Masking)</i>	16%
	<i>Cleaning and Detailing</i>	3%
	TOTAL:	100%

Date: 2014

AUTOGLASS TECHNICIAN

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Occupational Skills	16%
2	Structural and Non-structural Stationary Glass	37%
3	Laminated Glass	15%
4	Moveable Glass	24%
5	Glass Fabrication and Specialty Glass	8%
	TOTAL:	100%

Date: 2011

AUTOMOTIVE SERVICE TECHNICIAN (AST)

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	4%
2	Tools and Equipment	3%
3	Fasteners, Tubing, Hoses and Fittings	3%
4	Hoisting and Lifting	3%
5	Communication	1%
6	Technical Information	2%
7	Tires, Wheels, Hubs and Wheel Bearings	10%
8	Oxy-Acetylene Welding (OAW) and Cutting	4%
9	Gas Metal Arc Welding (GMAW)	3%
10	Suspension Systems 1	10%
11	Steering Systems 1	10%
12	Drive Shafts and Axles	4%
13	Braking Systems 1 (Non-ABS)	10%
14	Electrical and Electronic Principles	19%
15	Body Components and Trim	4%
16	Engine Principles	8%
17	Vehicle Maintenance Inspection	1%
18	Pre-Delivery Inspection	1%
	TOTAL:	100%

Date: 2019

AUTOMOTIVE SERVICE TECHNICIAN (AST)

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
AST-200	Cooling Systems	5
AST-205	Engine Lubrication Systems	5
AST-210	Accessory Drive Systems	4
AST 215	Engine Repair	12
AST-220	Starting Systems	8
AST-225	Charging Systems	8
AST-230	Lighting and Wiper Systems	8
AST-235	Steering Systems II	10
AST-240	Suspension Systems II	10
AST-245	Braking Systems II (ABS)	10
AST-250	Manual Transmissions and Transaxles	8
AST-255	Clutches	4
AST-260	Final Drive Assemblies	8
		100

Date: August 2020

AUTOMOTIVE SERVICE TECHNICIAN (AST)

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Transfer Cases	12
2	Gasoline Fuel Delivery and Injection Systems	13
3	Gasoline Ignition Systems	13
4	Vehicle Networking Systems	24
5	Gasoline Emission Control Systems	13
6	Gasoline Intake and Exhaust Systems	9
7	Electrical Options and Accessories	16
		100

Date: September 2021

AST SERVICE CENTRE TECHNICIAN

Provincial Certification

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Occupational Skills Safety-related Functions Tools, Equipment and Documentation Communication and Mentoring Techniques	9% 3 5 1
2	Engine and Engine Support Systems Engine Systems Gasoline Engine Support Systems	26% 10 16
3	Driveline Systems	8%
4	Electrical and Comfort Control Systems	23%
5	Steering and Suspension, Braking, Control Systems, Tires, Hubs and Wheel Bearings	31%
6	Body Components, Accessories and Trim	3%
	TOTAL:	100%

Date: 2019

BLASTER
Blasting Safety

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Blasting Safety Regulations, Definitions and Properties of Explosives	46%
2	Handling, Storage and Transportation of Explosives	27%
3	Blast Site Security and Practices	27%
	TOTAL:	100%

Date: 2010

BLASTER

First Class

SECTIONS AND EXAM WEIGHTING

SECTION	TITLE	PERCENTAGE OF QUESTIONS ON EXAM
1.	Uses and maintains tools and equipment	2
2.	Organizes work	4
3.	Performs routine trade activities	2
4.	Stores explosives	4
5.	Disposes of explosives	6
6.	Transports explosives	5
7.	Prepares blast area	5
8.	Controls blast area	5
9.	Develops and implements blast design	16
10.	Loads blast holes	6
11.	Controls flyrock	7
12.	Monitors and controls vibration	9
13.	Performs basic blasting operations	20
14.	Performs advanced blasting operations	3
15.	Performs secondary blasting operations	3
16.	Performs specialized blasting techniques	3
TOTAL		100%

Date: 2012

BLASTER
Second Class

SECTIONS AND EXAM WEIGHTING

SECTION	TITLE	PERCENTAGE OF QUESTIONS ON EXAM
1.	Uses and maintains tools and equipment	2
2.	Organizes work	5
3.	Performs routine trade activities	3
4.	Stores explosives	4
5.	Disposes of explosives	6
6.	Transports explosives	6
7.	Prepares blast area	5
8.	Controls blast area	5
9.	Develops and implements blast design	16
10.	Loads blast holes	7
11.	Controls flyrock	8
12.	Monitors and controls vibration	6
13.	Performs basic blasting operations	21
14.	Performs advanced blasting operations	2
15.	Performs secondary blasting operations	2
16.	Performs specialized blasting techniques	2
TOTAL		100%

Date: 2012

BLASTER

Third Class

SECTIONS AND EXAM WEIGHTING

SECTION	TITLE	PERCENTAGE OF QUESTIONS ON EXAM
1.	Uses and maintains tools and equipment	6
2.	Organizes work	4
3.	Performs routine trade activities	6
4.	Stores explosives	8
5.	Disposes of explosives	4
6.	Transports explosives	8
7.	Prepares blast area	5
8.	Controls blast area	5
9.	Develops and implements blast design	11
10.	Loads blast holes	9
11.	Controls flyrock	9
12.	Monitors and controls vibration	3
13.	Performs basic blasting operations	20
14.	Performs secondary blasting operations	1
15.	Performs specialized blasting techniques	1
TOTAL		100

Date: 2012

BOILERMAKER

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	6
2	Confined Space	3
3	Tools and Equipment	8
4	Work Platforms and Access Equipment	2
5	Metallurgy I	5
6	Oxy-fuel Cutting	10
7	Electric Arc Cutting and Welding	8
8	Communication	1
9	Drawings	10
10	Hoisting, Lifting and Rigging I	12
11	Basic Materials	10
12	Layout and Template Development I	5
13	Fabrication Fundamentals	8
14	Introduction to Pressure Vessels	10
15	Job Task Planning	2
		100

Date: December 2020

BOILERMAKER

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Shop Equipment	10
2	Metallurgy II	10
3	Basic Cutting and Welding	14
4	Hoisting, Lifting and Rigging II	14
5	Aerial Work Platforms	4
6	Layout and Template Development II	12
7	Component Fabrication I	12
8	Tube Expansion	10
9	Fiberglass Fitting	2
10	Maintenance and Repair	12
		100

Date: September 2021

BRICKLAYER

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5%
2	Rigging and Hoisting Awareness	4%
3	Access Equipment Awareness	5%
4	Tools and Equipment	5%
5	Mortars, Grouts and Adhesives	10%
6	Clay Masonry Units	4%
7	Concrete Masonry Units	4%
8	Leads	7%
9	Laying Brick to Line	10%
10	Laying Block to Line	8%
11	Anchors, Ties and Joint Reinforcement	6%
12	Trade Documentation and Communication	3%
13	Drawings	6%
14	Building Envelope	7%
15	Non-load Bearing Walls	16%
	TOTAL:	100%

Date: 2016

BRICKLAYER

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Load Bearing Walls	29%
2	Renovation	10%
3	Stone Masonry	28%
4	Restoration	25%
5	Glass Block	8%
	TOTAL:	100%

Date: 2017

BRICKLAYER

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Arches	24
2	Chimneys	20
3	Fireplaces	28
4	Steps and Patios	6
5	Refractory and Corrosion Resistant Materials	12
6	Ornamental and Sculpted Masonry	5
7	Job Planning	5
	TOTAL:	100%

Date: 2017

CARPENTER

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety Awareness	8
2	Tools and Equipment	7
3	Introduction to Lifting, Rigging and Hoisting	4
4	Fasteners, Connectors and Adhesives	5
5	Communication and Trade Documentation	3
6	Introduction to Project Drawings and Specifications	5
7	Temporary Access Equipment and Structures	4
8	Hoarding	3
9	Basic Site Layout	5
10	Wood and Wood Products	4
11	Non-Wood Products	4
12	Concrete	9
13	Beams and Supports	7
14	Floor Layout and Framing	8
15	Introduction to Framing Systems	6
16	Footings and Slab-On-Grade Forms	7
17	Deck Layout and Framing	4
18	Wall Forms	7
TOTAL:		100%

Date: 2016

CARPENTER

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Exterior Wall and Partition Layout and Framing	11
2	Building Science Principles	8
3	Building Envelope	9
4	Advanced Site Layout	8
5	Introduction to Roof and Ceiling Layout and Framing	10
6	Gable Roof Layout and Framing	10
7	Roof Coverings	7
8	Straight Stairs	10
9	Preserved Wood Foundations	3
10	Exterior Doors	7
11	Exterior Wall Covering Systems	10
12	Exterior Windows	7
		100

Date: 2017

CARPENTER

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Hip Roof Layout and Framing	11
2	Equal Slope Intersecting Roof Layout and Framing	10
3	Fixtures and Hardware	5
4	Interior Trim	8
5	Cabinets, Countertops and Built-in Units	7
6	Stair Forms	7
7	Interior Wall Systems	8
8	Ceilings	6
9	Pre-Cast Concrete	7
10	Suspended Slab and Beam Forms	9
11	Excavation, Shoring and Underpinning	6
12	Column and Vertical Forms	9
13	Interior Doors and Windows	7
	TOTAL:	100%

Date: 2018

CARPENTER

Harmonized Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Project Planning	11%
2	Building Science Practices	12%
3	Special Roof Layout and Framing	15%
4	Unequal Slope Roof Layout and Framing	13%
5	Finish and Geometric Stairs	13%
6	Flooring and Floorcoverings	10%
7	Panels, Tiles and Solid Wood Finishes Installation	10%
8	Renovation	16%
	TOTAL:	100%

Date: 2019

COMMUNICATIONS TECHNICIAN
Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Coaxial Cable - Transmission	4%
2	Shielded Twisted-Pair (STP) Cabling – Noise Mitigation	6%
3	Optical Fiber Cable	8%
4	Unshielded Twisted-Pair (UTP) – General Cabling	42%
5	Cabling Installation Code / Permits	40%
	TOTAL:	100%

Date: 2015

COOK

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Introduction to the Cooking Industry	4%
2	Personal Hygiene and Kitchen Sanitation	6%
3	Health and Safety	5%
4	Tools and Equipment	4%
5	Weights and Measures	4%
6	Cooking Principles	6%
7	Receiving and Storage	4%
8	Vegetables and Fungi	7%
9	Potatoes	8%
10	Pulses, Grains and Nuts	7%
11	Pastas and Dumplings	7%
12	Fruits	5%
13	Salads	6%
14	Sandwiches	5%
15	Eggs and Dairy Products	6%
16	Introduction to Baking	4%
17	Bread Products	6%
18	Eggs and Breakfast Cookery	6%
	TOTAL:	100%

Date: 2015

COOK

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Stocks and Soups	13%
2	Thickening and Binding Agents	6%
3	Sauces	13%
4	Meat Cutting and Processing	9%
5	Meat Cookery	8%
6	Poultry Cutting and Processing	8%
7	Poultry Cookery	7%
8	Fish	9%
9	Seafood	9%
10	Condiments and Accompaniments	4%
11	Pastries	5%
12	Cookies	4%
13	Pies, Tarts, Flans and Fillings	5%
	TOTAL:	100%

Date: 2016

COOK

Harmonized Level 3

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Charcuterie	12
2	Aspics, Jellies and Glazes	5
3	Marinades, Rubs and Brines	5
4	Game Cutting and Processing	8
5	Game Cookery	4
6	Hors D'oeuvres	6
7	Cakes and Tortes	5
8	Icings, Glazes, Meringues and Dessert Sauces	6
9	Creams and Custards	6
10	Frozen Desserts	5
11	Chocolate	6
12	Nutrition	8
13	Cost Controls	12
14	Menu Planning	12
	Total	100%

Date: 2017

ELECTRICIAN: CONSTRUCTION/INDUSTRIAL

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	2
2	Tools and Equipment	2
3	Access Equipment	2
4	Hoisting, Lifting and Rigging	2
5	Support Components	2
6	Communication and Trade Documentation	2
7	Mentoring I	1
8	Drawings, Schematics and Specifications I	4
9	Worksite Preparation and Organization	2
10	DC Theory	10
11	DC Circuits	10
12	Single-Phase AC Theory	6
13	Single-Phase AC Circuits I	10
14	Introduction to the Canadian Electrical Code	2
15	Grounding and Bonding I	2
16	Single Phase Services	6
17	Single Phase Power Distribution Equipment	6
18	Conductors and Cables	6
19	Conduit, Tubing and Fittings	5
20	Raceways	2
21	Boxes and Enclosures	4
22	Wiring Devices	2
23	Luminaires and Lighting Controls	8
24	Introduction to Communication Systems	2
	TOTAL:	100%

Date: 2017

ELECTRICIAN: CONSTRUCTION/INDUSTRIAL

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Job Planning	2
2	Voltage Drop and Power Loss	6
3	Environmental and Hazardous Installations	9
4	DC Generating Systems	4
5	Single-Phase AC Circuits II	13
6	Protective Devices	9
7	Extra-Low Voltage Transformers	3
8	Low-Voltage Single-Phase Transformers	5
9	Renewable Energy and Storage Systems I	3
10	Exit and Emergency Lighting Systems	4
11	Heating, Ventilation and Air-Conditioning Systems	6
12	Heating, Ventilation and Air-Conditioning System Controls	4
13	Electric Heating Systems	5
14	Electric Heating System Controls	6
15	Cathodic Protection Systems	2
16	DC Motors I	5
17	Motor Starters I	3
18	Motor Control Devices I	5
19	Drawings, Schematics and Specifications II	4
20	Lightning Protection Systems	2
		100

Date: 2018

ELECTRICIAN: CONSTRUCTION/INDUSTRIAL

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Three-Phase Theory	12
2	Ground Fault Detection Systems I	4
3	Three-Phase Services	6
4	Three-Phase Power Distribution Equipment	8
5	AC Generating Systems	8
6	Low-Voltage Three-Phase Transformers	6
7	High-Voltage Transformers	4
8	Motor Starters II	8
9	Motor Control Devices II	12
10	Single-Phase Motors I	8
11	Three-Phase Motors I	8
12	DC Motors II	4
13	AC Drives	8
14	DC Drives	4
	TOTAL:	100%

Date: 2019

ELECTRICIAN: CONSTRUCTION/INDUSTRIAL

Harmonized Construction Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Mentoring II	1
2	Grounding and Bonding Systems II	4
3	Power Conditioning, Uninterruptible Power Supply (UPS) and Surge Suppression Systems	6
4	High Voltage Equipment	5
5	High Voltage Cables	7
6	Renewable Energy and Storage Systems II	8
7	Lighting Standards	2
8	Airport Runway Lighting Systems and Controls	3
9	Traffic Signal Lights and Controls	3
10	Single-Phase Motors II	4
11	Three-Phase Motors II	4
12	DC Motors III	3
13	Commissioning and Decommissioning Systems	9
14	Automated Control Systems	15
15	Fire Alarm Systems	8
16	Security and Surveillance Systems	4
17	Communication Systems (Voice/Data/Video and Community Antenna Television)	3
18	Communication Systems (Public Address and Intercom)	2
19	Communication Systems (Nurse Call Systems)	2
20	Building Automation and Control Systems	7
	TOTAL:	100%

Date: 2019

ELECTRICIAN: CONSTRUCTION/INDUSTRIAL

Harmonized Industrial Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Ground Fault Detection Systems II	1
2	Power Conditioning, Uninterruptible Power Supply (UPS) and Surge	5
3	High Voltage Equipment	5
4	High Voltage Cables	4
5	Renewable Energy and Storage Systems II	4
6	Single-Phase Motors II	2
7	DC Motors III	2
8	Three-Phase Motors II	2
9	Commissions and Decommissions Systems	5
10	Fire Alarm Systems	4
11	Security and Surveillance Systems	4
12	Communication Systems (Voice/Data/Video and Community Antenna Television)	1
13	Communication Systems (Public Address and Intercom)	1
14	Communication Systems (Nurse Call Systems)	1
15	Building Automation and Control Systems	4
16	Predictive / Preventative Maintenance	5
17	Automated Control Systems	18
18	Pneumatic Control Systems	6
19	Hydraulic Circuits and Control Systems	4
20	Discrete and Analog Devices	10
21	Process Control	8
22	Environmental Control Systems	4
	TOTAL:	100%

Date: 2019

ELEVATING DEVICE MECHANIC CLASS A

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	6
2	Tools and Equipment	3
3	Work Organization and Documentation	5
4	Communication and Mentoring	2
5	Common Trade Activities	5
6	Measuring and Layout	3
7	Rigging and Hoisting/Lifting and Moving	8
8	Hoistway Equipment	10
9	Pit Equipment	4
10	Machine/Control Room/Space Equipment	10
11	Car Equipment	8
12	Testing and Inspection	8
13	Other Elevating Devices	14
14	Escalators and Moving Walkways	14
		100%

Date: August 2021

ELEVATING DEVICE MECHANIC CLASS B

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	6
2	Tools and Equipment	8
3	Work Organization and Documentation	7
4	Communication and Mentoring	2
5	Trade Activities	7
6	Measuring and Layout	4
	Rigging and Hoisting/Lifting and Moving	0 (not tested)
7	Runway Equipment	20
8	Pit Equipment	7
9	Machine/Control Room Space Equipment	18
10	Carriage Equipment	11
11	Testing and Inspection of Barrier Free Lifts	10
		100%

Date: August 2021

GASFITTER

G4: Industrial Maintenance Technician

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Protect Self and Others, Fasteners, Tools and Test Equipment	3%
2	Properties, Characteristics and Safe Handling of Fuel Gases, Utilization of Codes, Acts and Regulations	8%
3	Basic Electricity	10%
4	Advanced Electricity (Gas Fitter 1)	8%
5	Basic Piping and Tubing Systems and Piping and Tubing Systems for Industrial and Commercial Applications	13%
6	Technical Manuals, Specifications, Schematics, Drawings and Graphs and Introduction to Gas Appliances	3%
7	Controls	13%
8	The Building as a System	8%
9	Pressure Regulators, Meters and Fuel Containers	6%
10	Venting Practices	6%
11	Flame Safeguard	14%
12	Valve Trains and Burners	8%
	TOTAL:	100%

Date: 2018

GASFITTER

G7: Gas Pipefitter

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Properties, Characteristics and Safe Handling of Propane and Natural Gas	24%
2	Basic Piping and Tubing Systems	23%
3	Piping and Tubing Systems for Industrial and Commercial Applications	17%
4	Pressure Regulators, Meters and Fuel Containers	36%
	TOTAL:	100%

Date: 2011

HEAVY DUTY EQUIPMENT TECHNICIAN

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5
2	Tools and Equipment	4
3	Hoisting and Lifting	2
4	Communication and Documentation	1
5	Preventive Maintenance	2
6	Start, Move and Park Vehicle	2
7	Fasteners, Tubings, Hoses and Fittings	2
8	Lubrication and Fluids Servicing	4
9	Gaskets, Seals and Sealing Compounds	2
10	Bearings	3
11	Metallurgy	1
12	Cutting and Heating	2
13	Metal Inert Gas (MIG) Welding	2
14	Tires, Rims, Wheels and Hubs	6
15	Engine Principles	8
16	Electrical and Electronic Principles	10
17	Batteries	2
18	Lighting Circuits	2
19	Wiring Harnesses and Accessories	6
20	Introduction to Hydraulics	8
21	Hydraulic Fittings, Piping, Tubing and Hoses	3
22	Hydraulic Reservoirs, Coolers and Filters	3
23	Hydraulic Brake Systems I	6
24	Introduction to Air Brake Systems	7
25	Ozone Depleting Substances	1
26	Shielded Metal Arc Welding (SMAW)	2
27	Introduction to Steering System Components	4
	TOTAL:	100%

Date: June 2020

HEAVY DUTY EQUIPMENT TECHNICIAN

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: If you challenge this exam, you need to stay in the Harmonized Level 3 training.

SECTION	TOPIC	NUMBER OF QUESTIONS ON EXAM
1	Hydraulic Pumps and Motors	10
2	Hydraulic Cylinders	5
3	Control Valves	12
4	Accumulators	2
5	Hydraulic Brake Systems II	6
6	Hydraulic Systems Diagnostics and Testing	12
7	Front and Rear Suspensions	4
8	Track-Type Undercarriage	6
9	Hydrostatic Drives	4
10	Final Drives	4
11	Hydraulic Steering Systems	4
12	Tracked Steering Systems	6
13	Cabs and Protective Structures	2
14	Fire Suppression Units	2
15	Pneumatic Systems	2
16	Blades, Buckets and Cutting Edges	4
17	Winches, Wire Ropes and Accessories	3
18	Hydraulic Attachments	2
19	Frames and Structures	8
20	Material Handling Equipment	2
		100

Date: August 2020

HEAVY DUTY EQUIPMENT TECHNICIAN

Non-harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: If you challenge this exam, you need to stay in the **Non-harmonized** Level 3 training.

SECTION	TITLE	NUMBER OF QUESTIONS ON EXAM
1.	Drive Lines	20
2.	Ignition Systems	15
3.	Fuel Systems 1	19
4.	Clutches and Manual Transmissions	17
5.	Intake and Exhaust Systems	19
6.	Starting and Charging Systems	17
7.	HVAC Systems	18
		125

Date: 2012

INDUSTRIAL MECHANIC (MILLWRIGHT)

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	10
2	Hand and Portable Power Tools	10
3	Stationary Tools and Equipment	10
4	Access and Fall Protection Awareness	6
5	Lubricants	6
6	Measuring and Layout	10
7	Metallurgy and Metals	6
8	Oxy-Fuel Cutting and Welding	5
9	Plasma Arc Cutting	3
10	Rigging, Hoisting, Lifting and Moving	12
11	Communication and Trade Documentation	3
12	Work Planning	2
13	Fasteners and Retainers	9
14	Mechanical Drawings	8
	TOTAL:	100%

Date: 2019

INDUSTRIAL MECHANIC (MILLWRIGHT)

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Shafts, Bearings and Seals	20%
2	Couplings, Clutches and Brakes	14%
3	Chain and Belt Drive Systems	16%
4	Gear Systems	14%
5	Shaft Alignment I	14%
6	Shielded Metal Arc Welding (SMAW)	8%
7	Gas Metal Arc Welding (GMAW)	8%
8	Gas Tungsten Arc Welding (GTAW)	6%
	TOTAL:	100%

Date: May 2020

INDUSTRIAL MECHANIC (MILLWRIGHT)

Harmonized Level 3

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Shaft Alignment II	13%
2	Fans and Blowers	6%
3	Pumps	15%
4	Compressors	12%
5	Process Piping	9%
6	Process Tanks and Containers	4%
7	Hydraulic Systems	27%
8	Pneumatic and Vacuum Systems	14%
		100%

Date: August 2021

INDUSTRIAL MECHANIC (MILLWRIGHT)

Level 4

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Fans and Boilers	20%
2	Steam and Gas Turbines	21%
3	Alignment 1 (Basic) / Alignment 2 (Reverse and Cross Dial, and Laser)	18%
4	Dynamic Balancing / Vibration Analysis / Maintenance	19%
5	Machinery Installation and Optical Alignment	22%
	TOTAL:	100%

Date: 2011

INSTRUMENTATION & CONTROL TECHNICIAN

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5
2	Tools and Equipment	5
3	Material Handling Equipment	4
4	Communication and Trade Documentation	5
5	Introduction to Drawings, Schematics and Specifications	6
6	Direct Current (DC) Theory	14
7	Series and Parallel Circuits	14
8	Voltage Drop and Power Loss	5
9	Conductors and Cables	8
10	On-off Control Devices	13
11	Wireways, Raceways and Fittings	5
12	Introduction to Pressure Measurement and Calibration	11
13	Tubing and Piping Systems	5
	TOTAL:	100%

Date: 2017

INSTRUMENTATION AND CONTROL TECHNICIAN

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Introduction to Fluids	8
2	Final Control Elements	18
3	Alternating Current (AC) Theory	13
4	Process Measurement	28
5	Hydraulic Supply Systems and Control Devices	9
6	Pneumatic Supply Systems	11
7	Electronics Components (Circuits and Power Supplies)	13
	TOTAL:	100%

Date: 2018

INSTRUMENTATION AND CONTROL TECHNICIAN

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Basic Process Control	26
2	Trade Related Computer Use	5
3	Variable Speed Drives (VSDs)	11
4	Process Analyzers I	18
5	Equipment Monitoring Devices	9
6	Communication Systems and Devices	13
7	Process Analyzers II	13
8	Job Planning	4
	TOTAL:	100%

Date: 2019

INSTRUMENTATION AND CONTROL TECHNICIAN

Harmonized Level 4

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Advanced Process Control	24
2	Supervisory Control and Data Acquisition Systems	7
3	Human Machine Interface Systems	10
4	Safety Systems and Devices	14
5	Programmable Logic Controller Systems	26
6	Distributed Control Systems	19
		100

Date: August 2020

INSULATOR (HEAT AND FROST)

Harmonized Level 1

Coming Soon

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

Date:

INSULATOR (HEAT AND FROST)

Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Trade Math	17%
2	Introduction to Foam Insulation	8%
3	Installation of Flexible Foam Insulation	8%
4	Air Handling System Components	5%
5	Blanket Insulation	5%
6	Fibrous Board Insulation	5%
7	Insulating Breeching, Flues and Precipitators	5%
8	Insulating Methods (Cylinders and Heads)	14%
9	Finishing Methods	7%
10	Introduction to Cryogenic Work	6%
11	Insulating Cryogenic Systems	11%
12	Insulate Underground Piping	9%
	TOTAL:	100%

Date: 2012

INSULATOR (HEAT AND FROST)

Level 3

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Blueprint Reading 1	8%
2	Blueprint Reading 2	7%
3	Introduction to Parallel Line Development	7%
4	Introduction to Radial Line Development	4%
5	Introduction to Triangulation	5%
6	Tees, Valves, and Elbows	18%
7	Flanges and End-caps	11%
8	Cones, Bevels and Transitions	13%
9	Tank Heads	6%
10	Firestopping	21%
	TOTAL:	100%

Date: 2013

MACHINIST

Level 1

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety, Tools and Equipment	10%
2	Hand and Power Tools / Drilling	18%
3	Basic Layout / Drawings	13%
4	Basic Measurement	9%
5	Power Saws and Grinders	9%
6	Lathes and Lathe Operation	9%
7	Lathe Drilling, Boring, Reaming and Tapping / Hand Threading	18%
8	Taper Turning	5%
9	Milling Machines and Operation	9%
	TOTAL:	100%

Date: 2010

MACHINIST

Level 2

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Advanced Lathe Operations	
	Advanced Conventional Lathe Operation	34%
2	Vertical Milling Machine Operations	
	Vertical Milling Machine Operation	30%
3	Specialty Machinable Materials	
	Machinable Materials (non-metallic and specialty)	35%
	Power Transmission and Lubrication	1%
TOTAL:		100%

Date: 2015

MARINE SERVICE TECHNICIAN

Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	17
2	Business and Yard Practices	5
3	Technology and Design	8
4	Trade Mathematics	14
5	Tools and Equipment	10
6	Wood	4
7	Resins and Other Materials	10
8	Gel Coats	3
9	Mechanical Systems	9
10	Finishing and Painting	11
11	Electrical Systems	9
	TOTAL:	100%

Date: 2018

MARINE SERVICE TECHNICIAN

Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Design Basics	7
2	Principles of Powering and Drive Shaft Assembly	8
3	Compressed Air	5
4	Fasteners, Adhesives and Bedding, and Abrasive Materials	15
5	Properties and Compatibility of Metals and Drilling and Cutting Operations in Metals	13
6	Coatings and Preservatives	11
7	Engine Room Layout and Ventilation	6
8	Composites	7
9	Wiring and Testing	13
10	Plumbing	15
	TOTAL:	100%

Date: 2018

MARINE SERVICE TECHNICIAN

Level 3

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	FRP Vessel Construction	9
2	Metal Vessel Construction	7
3	Stationary Power Tools	10
4	Prevent Corrosion in Metals	10
5	Service Inboard Engines	10
6	Engine Lubrication	10
7	Install Hardware and Thru-Hulls	14
8	Steering Systems and Controls	18
9	Battery Installations	6
10	Properties of Propane	6
	TOTAL:	100%

Date: 2018

MARINE SERVICE TECHNICIAN

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5
2	Business Practices	4
3	Yard Practices	5
4	Technology & Design	9
5	Trade Mathematics	6
6	Tools & Equipment	5
7	Materials	14
8	Marine Metalworking	4
9	Composite Fabrication & Repairs	6
10	Mechanical Systems	16
11	Finishing & Painting	4
12	Fastenings & Installations	6
13	Electrical Systems	8
14	Plumbing Systems	8
	TOTAL:	100%

Date: 2018

METAL FABRICATOR (FITTER)

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	4
2	Tools and Equipment	3
3	Stationary Machinery	3
4	Hoisting, Lifting and Rigging	5
5	Access Equipment	2
6	Communication and Trade Documentation	2
7	Introduction to Welding Processes	7
8	Shielded Metal Arc Welding I - Set up, Strike and Maintain an Arc	4
9	Shielded Metal Arc Welding II - Fillet Weld, All Positions	6
10	Gas Metal Arc Welding I - Set up and Maintain an Arc	6
11	Flux Core Arc Welding I - Set up and Deposit a Weld	3
12	Metal Core Arc Welding I - Set up and Deposit a Weld	2
13	Weld Faults	4
14	Fabrication Fundamentals	6
15	Drawings	9
16	Introduction to Layout and Pattern Development	4
17	Gas Metal Arc Welding II - Fillet Weld, All Positions	5
18	Oxy-fuel	7
19	Electric Arc Cutting and Gouging	3
20	Plasma Arc Cutting and Gouging	3
21	Metallurgy I	3
22	Groove Welding I - Shielded Metal Arc Welding, Flat and Horizontal	5
23	Groove Welding II - Gas Metal Arc Welding, Flat and Horizontal	4
	TOTAL:	100%

Date: 2016

METAL FABRICATOR (FITTER)

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Drawings II	23
2	Layout - Simple Components and Templates	22
3	Fabrication - Simple Components	10
4	Fit and Assemble - Simple Components	6
5	Bending Equipment	4
6	Plate Rolling Equipment	3
7	Shape Rolling Equipment	2
8	Press Brake Equipment	3
9	Plasma Arc Cutting II (Review)	2
10	Shielded Metal Arc Welding III - Tack Weld, All Positions	2
11	Gas Metal Arc Welding III - Tack Weld, All Positions	2
12	Flux Core Arc Welding II - Tack Weld, All Positions	2
13	Metal Core Arc Welding II - Tack Weld, Flat and Horizontal Positions	4
14	Gas Tungsten Arc Welding I - Set up and Maintain an Arc	3
15	Gas Tungsten Arc Welding II - Tack Weld, All Positions	3
16	Quality Assurance/Control I	4
17	Metallurgy II	5
	TOTAL:	100%

Date: 2017

METAL FABRICATOR (FITTER)

Harmonized Level 3

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Drawings III	19
2	Automated Shape Cutting Machines	3
3	Layout - Complex Components and Templates	20
4	Fabrication - Complex Components	16
5	Fit and Assemble - Complex Assemblies	16
6	Finish Preparation	5
7	Communication and Work Planning	5
8	Quality Assurance/Control II	7
9	Metallurgy III	9
	TOTAL:	100

Date: 2018

PLUMBER

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

UNIT CODE	UNIT TITLE	% OF QUESTIONS
PLB-100	Safety	7
PLB-105	Tools and Equipment	6
PLB-110	Access Equipment	4
PLB-115	Hoisting, Lifting and Rigging	4
PLB-120	Welding, Fuel Brazing and Cutting	5
PLB-125	Plastic Piping	9
PLB-130	Copper Pipe Tube and Tubing	10
PLB-135	Steel Piping	10
PLB-140	Cast Iron Piping	7
PLB-145	Drainage, Waste and Venting Systems I	17
PLB-150	Drawings I	8
PLB-155	Communication Techniques	2
PLB-160	Potable Water Distribution I	11
TOTAL		100%

Date: 2017

PLUMBER

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Piping Valves	10
2	Specialized Piping	3
3	Plumbing Fixtures, Appliances and Accessories	10
4	Hot Water Storage Tanks and Heaters	10
5	Drawings II	15
6	Drainage, Waste and Venting Systems II	21
7	Hydronic Systems I	31
	TOTAL:	100%

Date: 2018

PLUMBER

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Hydronic Systems II	12
2	Water Service	4
3	Potable Water Distribution II	15
4	Commercial Drainage Systems	15
5	Commercial Venting Systems	13
6	Storm and Combination Drainage Systems (Sewers)	6
7	Irrigation Systems	2
8	Commercial/Institutional Plumbing Fixtures and Accessories	11
9	Compressed Air Systems	3
10	Single Family Dwelling Fire Protection Systems	2
11	Hydronic System Controls	9
12	Green Technology	6
13	Basic Electricity	2
	TOTAL:	100%

Date: 2019

PLUMBER

Harmonized Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Gas Piping Systems	18
2	Medical Gas Systems	6
3	Low Pressure Steam Systems	9
4	Private Sewage Treatment Systems	10
5	Commercial Sewage Treatment Systems	6
6	Cross Connection Control	14
7	Pressure Systems (Rural Water Supply)	15
8	Water Treatment Systems	9
9	Process Piping Systems	7
10	Job Planning and Trade Documentation	4
11	Mentoring	2
		100

Date: August 2020

POWERLINE TECHNICIAN

Level 1

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety and Trade Practice	18%
2	Tools and Equipment	18%
3	Basic DC/AC Theory	26%
4	Electrical Unit Measurement / 3-Wire System	20%
5	Overhead Conductors	18%
	TOTAL:	100%

Date: 2010

REFRIGERATION & A/C MECHANIC

Level 1

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Occupational Skills	20%
2	Safety / Tools and Equipment	20%
3	Air Conditioners, Refrigeration and Piping	19%
4	Compressors / Ancillary Device	19%
5	Electrical Fundamentals / Motors 1	22%
	TOTAL:	100%

Date: 2009

RESTORATION STONE MASON

Provincial

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Occupational Skills	30%
2	Masonry Systems	10%
3	Stone Systems	22%
4	Restoration	20%
5	Specialized Masonry Work	18%
	TOTAL:	100%

Date: 2017

ROOFER

Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	14%
2	Tools and Equipment	14%
3	Kettles and Burners	9%
4	Drawings	11%
5	Communication and Trade Documentation	4%
6	Hoisting, Lifting and Rigging	9%
7	Access Equipment	4%
8	Roofing Materials	14%
9	Introduction to Roof Structures	7%
10	Planning and Estimating	14%
	TOTAL:	100%

Date: 2015

ROOFER

Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Fasteners, Adhesives, and Sealants	16%
2	Mechanical Roofing Equipment	11%
3	Roof Deck Preparation	31%
4	Roof Membranes	16%
5	Low Slope and Flat Roofs	26%
	TOTAL:	100%

Date: 2014

ROOFER

Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Roof Membrane Systems 2	30%
2	Steep Roofs	20%
3	Waterproofing and Damp-proofing	10%
4	Metal Flashings	10%
5	Roof Maintenance and Repair	20%
6	Job Planning	10%
	TOTAL:	100%

Date: 2014

SHEET METAL WORKER

New Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TITLE	TOTAL
1.	Safety and Elevating Devices	
	<i>Safety</i>	5
	<i>Stationary and Mobile Work Platforms</i>	4
	<i>Hoisting, Lifting and Positioning Equipment</i>	2
2.	Tools and Equipment	
	<i>Tools and Equipment</i>	8
3.	Trade Practice	
	<i>Communication and Trade Documents</i>	3
	<i>Sheet Metal Math Fundamentals</i>	9
4.	Welding 1	
	<i>Introduction to Welding</i>	5
	<i>Resistance Spot Welding</i>	1
	<i>Plasma Arc Cutting</i>	1
	<i>Metallurgy</i>	8
5.	Pattern Development 1 (Simple and Straight Line)	
	<i>Drafting</i>	4
	<i>Pattern Development 1 (Simple and Straight Line)</i>	36
6.	Fabrication and Installation Fundamentals	
	<i>Fabrication and Installation Fundamentals</i>	10
		100%

Date: 2018

SHEET METAL WORKER

New Level 2

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTION	TITLE	PERCENTAGE OF QUESTIONS ON EXAM
1.	Drawings I	
	<i>Drawings and Specifications</i>	12%
2.	Pattern Development II	
	<i>Parallel Line</i>	8%
3.	Pattern Development II	
	<i>Radial Line</i>	8%
4.	Pattern Development II	
	<i>Triangulation</i>	9%
5.	Welding II	
	<i>Introduction to Gas Metal Arc Welding (GMAW)</i>	10%
	<i>Oxy-fuel Cutting, Heating and Brazing/Hard Soldering</i>	7%
	<i>Shield Metal Arc Welding (SMAW)</i>	8%
6.	Air Handling Systems 1	
	<i>Fabrication (Air Handling Systems & Components)</i>	6%
	<i>Installation (Air Handling Systems)</i>	9%
7.	Chimneys, Breeching and Venting	
	<i>Air Quality Management</i>	9%
	<i>Chimneys, Breeching and Venting</i>	9%
8.	Metal Roofing and Architectural Metal	15%
		100%

Date: 2020

SHEET METAL WORKER

New Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

Percentage of Questions

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Parallel Line Development (Architectural Applications)	10
2	Radial Line Development (Oblique Fittings)	5
3	Triangulation 2	10
4	Duct System Design	22
5	Gas Tungsten Arc Welding (GTAW)	9
6	Specialty Products	11
7	Air Handling Systems 2	3
8	Introduction to Testing and Balancing	
	Testing	2
	Air Balancing	12
9	Electrical Principles	6
10	System Maintenance and Repair	10
		100

Date: August 2020

SHEET METAL WORKER

New Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Pattern Development (Computer Technology)	5%
2	Material Handling Systems	16%
3	Thermal Insulation, Lagging/Cladding and Flashing	12%
4	Testing, Adjusting and Balancing (TAB)	16%
5	Commissioning	13%
6	Job Planning	14%
7	Drawings 2	20%
8	Mentoring	4%
		100%

Date: August 2021

SPRINKLER FITTER

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	4
2	Tools and Equipment	4
3	Access Equipment	3
4	Rigging, Hoisting and Lifting	3
5	Drawings I	4
6	Trade Related Documents	2
7	Communication Techniques	2
8	Steel Pipe and Fittings	8
9	Plastic Pipe and Fittings	6
10	Copper Pipe and Tubing	4
11	Sprinkler Heads and Nozzles	12
12	Supports and Hangers	7
13	Pipe Design and Installation I	8
14	Soldering, Brazing and Oxy-Acetylene Cutting	2
15	Wet Pipe Sprinkler Systems	8
16	Dry Pipe Sprinkler Systems	8
17	Antifreeze Sprinkler Systems	2
18	Pre-Action Systems I	4
19	Deluge Systems I	4
20	System Drainage I	3
21	Principals of Electricity	2
	TOTAL:	100%

Date: 2019

SPRINKLER FITTER

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Pipe Design and Installation II	9
2	Drawings II	9
3	System Drainage II	6
4	Commissioning Water Supply Systems I	6
5	Commissioning Fire Protections Systems I	6
6	Seismic Protection	6
7	Cross-connection Control	4
8	Standpipe and Hose Systems	11
9	Water Supply, Hydrants and Fire Department Connections	11
10	Detection Devices	6
11	Signal-Initiating Devices	7
12	Pre-Action Systems II	10
13	Deluge Systems II	9
		100

Date: December 2020

SPRINKLER FITTER

Harmonized Level 3

Coming Soon

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

Date:

STEAMFITTER/PIPEFITTER

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

UNIT CODE	UNIT TITLE	% OF QUESTIONS
1	Safety	6
2	Communication and Trade Documentation	4
3	Tools and Equipment	9
4	Access Equipment	3
5	Introduction to Welding	5
6	Fuel Brazing and Soldering	6
7	Rigging, Hoisting and Lifting	8
8	Bracket, Support, Hanger, Guides and Anchor Fabrication	6
9	Drawings and Specifications I	10
10	Copper Tube and Tubing	7
11	Pipe and Tube Bending	6
12	Plastic Piping	5
13	Carbon Steel Piping	11
14	Stainless Steel Piping	6
15	Piping Valves	8
TOTAL		100%

Date: 2017

STEAMFITTER/PIPEFITTER

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

UNIT CODE	UNIT TITLE	% OF QUESTIONS
1	Drawings and Specifications II	17
2	Template Development	16
3	Piping System Component Fabrication (Spool)	14
4	Fiberglass Piping	5
5	Specialty Piping	12
6	Hydronic Systems	25
7	Heat Tracing Systems (Liquid)	5
8	Electrical Principles	6
TOTAL		100%

Date: 2018

STEAMFITTER/PIPEFITTER

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

UNIT CODE	UNIT TITLE	% OF QUESTIONS
1	Industrial Water and Waste Systems	5
2	Heat Tracing Systems (Steam)	7
3	Hydronic System Controls	12
4	Low Pressure Steam Systems	25
5	Fuel Systems	24
6	Medical Gas Systems	8
7	Cross Connection Control	6
8	Instrumentation	8
9	Controlled Bolting and Tensioning	5
TOTAL		100%

Date: 2019

STEAMFITTER/PIPEFITTER

Harmonized Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

UNIT CODE	UNIT TITLE	% OF QUESTIONS
STM-400	Complex Hoisting, Lifting and Rigging	11
STM-405	Hydraulic Systems	7
STM-410	Compressed Air and Pneumatic Systems	7
STM-415	High Pressure Steam Systems	25
STM-420	Refrigeration Systems	9
STM-425	Heat Recovery Systems	4
STM-430	Geo-Exchange and Geothermal Systems	6
STM-435	Solar Heating Systems	5
STM-440	Process Piping Systems	11
STM-445	System Testing and Commissioning	7
STM-450	Job Planning	4
STM-455	Quality Control	4
		100

Date: October 2020

STEAMFITTER/PIPEFITTER

Non-harmonized Level 4

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1.	Gas Piping 2	
	<i>Gas Piping Systems (High Pressure)</i>	20%
2.	Refrigeration / Instrumentation	
	<i>Refrigeration Systems</i>	8%
	<i>Process Piping Systems</i>	5%
	<i>Instrumentation</i>	10%
3.	Pumps / Compressors & Hydraulic Systems	
	<i>Pumps, Hydraulic Systems, and Compressed Air</i>	17%
4.	High Pressure Steam	
	<i>High Pressure Steam Systems</i>	25%
5.	Job Planning, Commissioning and Quality Control	
	<i>Job Planning</i>	5%
	<i>Commissioning, Controlled Bolting, and Quality Control</i>	10%
		100%

Date: 2016

TRUCK AND TRANSPORT MECHANIC

Harmonized Level 1

SECTIONS AND EXAM WEIGHTING

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	5
2	Tools and Equipment	4
3	Hoisting and Lifting	2
4	Communication and Documentation	1
5	Preventive Maintenance	2
6	Start, Move and Park Vehicle	2
7	Fasteners, Tubings, Hoses and Fittings	2
8	Lubrication and Fluids Servicing	4
9	Gaskets, Seals and Sealing Compounds	2
10	Bearings	3
11	Metallurgy	1
12	Cutting and Heating	2
13	Metal Inert Gas (MIG) Welding	2
14	Tires, Rims, Wheels and Hubs	6
15	Engine Principles	8
16	Electrical and Electronic Principles	10
17	Batteries	2
18	Lighting Circuits	2
19	Wiring Harnesses and Accessories	6
20	Introduction to Hydraulics	8
21	Hydraulic Fittings, Piping, Tubing and Hoses	3
22	Hydraulic Reservoirs, Coolers and Filters	3
23	Hydraulic Brake Systems I	6
24	Introduction to Air Brake Systems	7
25	Ozone Depleting Substances	1
26	Shielded Metal Arc Welding (SMAW)	2
27	Introduction to Steering System Components	4
	TOTAL:	100%

Date: June 2020

TRUCK AND TRANSPORT MECHANIC

Harmonized Level 2

Please note: If you challenge this exam, you need to stay in the **Harmonized Level 3** training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Front Axles and Suspension Systems	7
2	Rear Axles and Suspension Systems	9
3	Wheel and Axle Alignment	8
4	Frames and Chassis	4
5	Power Assisted Steering	6
6	Dual Air Brake Systems	18
7	Anti-lock Braking and Traction Control Systems	11
8	Cab Components	5
9	Trailer Coupling Devices	9
10	Truck Bodies and Trailers	9
11	Vehicle Safety Inspections	2
12	Hydraulic Pumps	5
13	Hydraulic Cylinders	2
14	Control Valves	3
15	Accumulators	2
		100%

Date: August 2021

TRUCK AND TRANSPORT MECHANIC
Non-harmonized Level 2
SECTIONS AND EXAM WEIGHTING

Please note: If you challenge this exam, you need to stay in the **Non-harmonized** Level 3 training.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Drive Lines	16%
2	Ignition Systems	12%
3	Fuel Systems 1	15%
4	Clutches and Manual Transmissions	14%
5	Intake and Exhaust Systems	15%
6	Starting and Charging Systems	14%
7	HVAC Systems	14%
	TOTAL:	100%

Date: 2012

WELDER

Harmonized Level 1

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Safety	4
2	Tools and Equipment	3
3	Stationary Machinery	3
4	Hoisting, Lifting and Rigging	5
5	Access Equipment	2
6	Communication and Trade Documentation	2
7	Introduction to Welding Processes	7
8	Shielded Metal Arc Welding I - Set up, Strike and Maintain an Arc	4
9	Shielded Metal Arc Welding II - Fillet Weld, All Positions	6
10	Gas Metal Arc Welding I - Set up and Maintain an Arc	6
11	Flux Core Arc Welding I - Set up and Deposit a Weld	3
12	Metal Core Arc Welding I - Set up and Deposit a Weld	2
13	Weld Faults	4
14	Fabrication Fundamentals	6
15	Drawings	9
16	Introduction to Layout and Pattern Development	4
17	Gas Metal Arc Welding II - Fillet Weld, All Positions	5
18	Oxy-fuel	7
19	Electric Arc Cutting and Gouging	3
20	Plasma Arc Cutting and Gouging	3
21	Metallurgy I	3
22	Groove Welding I - Shielded Metal Arc Welding, Flat and Horizontal	5
23	Groove Welding II - Gas Metal Arc Welding, Flat and Horizontal	4
	TOTAL:	100%

Date: 2016

WELDER

Harmonized Level 2

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress to the next level of training.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Quality Assurance/Control I	5
2	Metallurgy II	6
3	Flux Core Arc Welding II - Fillet and Groove Weld Plate, All Positions	12
4	Metal Core Arc Welding II - Fillet and Groove Weld, All Positions	4
5	Shielded Metal Arc Welding III - Groove Weld Plate, All Positions	15
6	Shielded Metal Arc Welding IV - Fillet and Groove Weld, Medium Carbon Steel.	5
7	Gas Metal Arc Welding III - Groove Weld, All Positions	10
8	Gas Metal Arc Welding IV - Fillet and Groove Weld, Medium Carbon Steel	4
9	Gas Tungsten Arc Welding I - Set up and Maintain an Arc	10
10	Gas Tungsten Arc Welding II - Fillet Weld, All Positions	10
11	Gas Tungsten Arc Welding III - Groove Weld, All Positions	10
12	Jigs and Fixtures	3
13	Submerged Arc Welding I	3
14	Work Planning	3
	TOTAL:	100%

Date: 2017

WELDER

Harmonized Level 3

Please note: Apprentices must pass the Level Exam at the end of their level of training in order to progress.

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Quality Assurance/Control II	4
2	Metallurgy III	6
3	Shielded Metal Arc Welding V - Pipe and Tubing, All Positions	13
4	Gas Metal Arc Welding V - Pipe and Tubing, All Positions	9
5	Flux Core Arc Welding III - Pipe and Tubing, All Positions	7
6	Gas Tungsten Arc Welding V - Pipe and Tubing, All Positions	14
7	Shielded Metal Arc Welding VI - Alloy Steels	5
8	Gas Metal Arc Welding VI - Aluminum Alloy	8
9	Gas Metal Arc Welding VII - Stainless Steel Alloys	6
10	Gas Tungsten Arc Welding IV - Fillet and Groove Weld, Medium Carbon Steel	7
11	Gas Tungsten Arc Welding VI - Ferrous and Non-Ferrous Alloys	14
12	Build-up of Metal Parts	4
13	Submerged Arc Welding II	3
	TOTAL:	100%

Date: 2018