



Exam Breakdowns for Provincial and Level Exams

Nova Scotia Apprenticeship Agency Thompson Building, 3rd Floor
1256 Barrington Street, Halifax, NS B3J 2P8 Phone: 424-5651, Toll Free: 1-800-494-5651
nsapprenticeship.ca

Exam Breakdowns for Provincial and 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 breakdowns, visit the Red Seal website: www.red-seal.ca

- 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 to progress.

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AGRICULTURAL 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

AGRICULTURAL EQUIPMENT TECHNICIAN

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	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

AGRICULTURAL EQUIPMENT TECHNICIAN

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	TITLE	NUMBER OF QUESTIONS ON EXAM
1	Cooling Systems	4
2	Engine Lubrication Systems	5
3	Drivelines	3
4	Drive Axle Assemblies	9
5	Engine Clutches	6
6	Diesel Fuel Supply Systems	6
7	Starting Systems	8
8	Starting Aids	3
9	Charging Systems	8
10	Electronic Ignition Systems	4
11	Non-Diesel Fuel Systems	10
12	Manual Transmissions	12
13	Pump Drives/Power Take Offs	3
14	Transfer Cases	3
15	Automatic/Power Shift and CVT Transmissions	12
16	Torque Converters	4
		100

Date: July 2022

ALARM AND SECURITY TECHNICIAN

Provincial Certification Exam

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

ARCHITECTURAL CLADDER
Provincial Certification Exam
SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Performs Common Occupational Skills	21
2	Fabricates Products and Components	30
3	Installs Products and Components	30
4	Performs Maintenance and Repair	19
	TOTAL:	100%

Date: January 2025

AUTO BODY AND COLLISION 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	8
2	Hand and Portable Power Tools	5
3	Plasma and Oxy Fuel Cutting	4
4	Lifting Equipment	5
5	Refinishing Tools	4
6	Welding	13
7	Trade Documentation	4
8	Communications	1
9	Trim and Hardware	6
10	Metal Panels and Components (Introduction)	10
11	Plastic and Composite Panels and Components I	9
12	Surface Preparation	10
13	Repair Materials	7
14	Refinishing I	7
15	Exterior Detailing	3
16	Vehicle Cleaning	3
17	Workplace Mentoring I	1
Total		100%

Date: September 2022

AUTO BODY AND COLLISION 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	Aluminum Welding	7
2	Vehicle Construction	9
3	Corrosion Protection and Sound Deadening	9
4	Structural and Laminated Glass	7
5	Metal Panels and Components Repair	14
6	Plastic & Composite Panels and Components II	11
7	Non-Structural Glass	4
8	Interior Components	6
9	Refinishing II	14
10	Colour Adjustments	12
11	GMAW Silicon Bronze Welding	7
Total		100%

Date: August 2024

AUTO BODY AND COLLISION 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	Frame and Unibody Repair and Measuring	12
2	Final Operational Checks	5
3	Structural Component Preparation	12
4	Structural Component Repair	20
5	Mechanical Components I (Steering, Suspension and Brakes)	18
6	Electrical Components	15
7	Restraint Systems	10
8	Alternative Fuel Systems	8
Total		100%

Date: May 2025

AUTOGLASS TECHNICIAN

Provincial Certification Exam

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

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	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

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
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

AUTOMOTIVE SERVICE TECHNICIAN (AST)

Harmonized Level 4

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Mentoring	2
2	Diesel Fuel Delivery and Injection Systems	9
3	Diesel Emission Control Systems	10
4	Diesel Intake and Exhaust Systems	3
5	Entertainment Systems	7
6	Instrumentation and Information Displays	7
7	Restraints Systems	12
8	Automatic Transmissions and Transaxles	22
9	Heating, Ventilation and Air Conditioning (HVAC) Systems	16
10	Hybrid and Electric Vehicle Systems	12
		100

Date: July 2022

AST SERVICE CENTRE TECHNICIAN

Provincial Certification Exam

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Occupational Skills	9%
	Performs Safety-related Functions	3%
	Uses Tools, Equipment and Documentation	6%
2	Engine and Engine Support Systems	26%
	Diagnoses Engine Systems	8%
	Repairs Engine Systems	2%
	Diagnoses Gasoline Engine Support Systems	10%
	Repairs Gasoline Engine Support Systems	6%
3	Driveline Systems	8%
	Diagnoses Driveline Systems	4%
	Repairs Driveline Systems	4%
4	Electrical and Comfort Control Systems	23%
	Diagnoses Electrical Systems and Components	12%
	Repairs Electrical Systems and Components	11%
5	Steering and Suspension, Braking, Control Systems, Tires, Hubs and Wheel Bearings	31%
	Diagnoses Steering and Suspension, Braking, Control Systems, Tires, Wheels, Hubs and Wheel Bearings	12%
	Repairs Steering and Suspension, Braking, Control Systems, Tires, Wheels, Hubs and Wheel Bearings	19%
6	Body Components, Accessories and Trim	3%
	Diagnoses Body Components, Accessories and Trim	1%
	Repairs Body Components, Accessories and Trim	2%
Total		100%

Date: 2019

BLACK BEAUTY CULTURE HAIR INNOVATOR

Provincial Certification Exam

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Performs Common Occupational Skills	20%
	Performs safety-related and hygienic functions	6%
	Uses tools and equipment	6%
	Prepares for client services	2%
	Applies cultural and historical knowledge to BBCHI consultation	6%
2	Performs Hair and Scalp Care	24%
	Analyzes and responds to hair and scalp conditions	12%
	Shampoos and conditions hair and scalp	12%
3	Styles and Finishes Hair	20%
	Prepares and styles wet hair	8%
	Styles and finishes dry hair	12%
4	Performs Specialized Services	32%
	Braids hair	10%
	Performs hair extensions, wigs and hairpiece services	8%
	Performs and maintains locks and twists	10%
	Removes braids, extensions, locks, twists	4%
5	Performs Salon Operations	4%
	Performs front desk responsibilities	2%
	Establishes business fundamentals	2%
Total		100%

Date: November 2022

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

BOILERMAKER

Harmonized Level 3

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Mentoring	1
2	Advanced Welding	12
3	Hoisting, Lifting and Rigging III	14
4	Testing and Inspection	9
5	Layout and Template Development III	9
6	Component Fabrication II	9
7	Boilers	14
8	Condensers and Exchangers	14
9	Tanks	14
10	Introduction to Heavy Industry	4
		100

Date: July 2022

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	4%
2	Rigging, Lifting, Hoisting and Material Handling Equipment	3%
3	Access Equipment	3%
4	Tools and Equipment	5%
5	Mortars, Concrete, Grouts and Adhesives I	10%
6	Laying Brick to Line	17%
7	Laying Block to Line	16%
8	Anchors, Tie Systems and Joint Reinforcements	5%
9	Mentoring I	1%
10	Job Planning and Trade Documentation	3%
11	Drawings and Specifications	9%
12	Building Envelope	7%
13	Non-Load-Bearing Walls	17%
	TOTAL:	100%

Date: Oct 2024

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

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

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 Certification Exam

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1.	Performs Common Occupational Skills	
	Performs Safety Related Functions	3%
	Uses tools and equipment	2%
	Organizes work	2%
	Installs support components	5%
	Commissions and decommissions communication and associated systems	2%
	Performs labelling, testing and documentation	1%
2.	Installs and Services Cables Inside and Outside Plant	
	Lays out and creates cable pathways (inside plant)	10%
	Lays out and creates cable pathways (outside plant)	5%
	Selects and prepares cable for installation (inside and outside plant)	5%
	Installs cable (inside and outside plant)	25%
	Services cable plant infrastructure	5%
3.	Installs and Services Signalling, Communication and Associated Systems	
	Installs security and surveillance systems	12%
	Installs and services communication and associated systems	14%
	Installs and services building automated systems	9%
	TOTAL:	100%

Date: June 2022

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, Kitchen Sanitation and Food Safety	5%
3	Health and Safety	5%
4	Tools and Equipment	4%
5	Weights and Measures	4%
6	Cooking Principles	4%
7	Receiving and Storage	4%
8	Vegetables and Fungi	5%
9	Potatoes	5%
10	Pulses, Grains, Seeds and Nuts	5%
11	Dry Pasta and Noodles	6%
12	Fruits	5%
13	Salads	5%
14	Sandwiches	5%
15	Eggs, Dairy and Alternative Products	5%
16	Introduction to Baking	4%
17	Bread Products	5%
18	Egg and Breakfast Cookery	6%
19	Stocks and Broths	6%
20	Fin Fish I	5%
21	Introduction to Poultry	3%
	TOTAL:	100%

Date: September 2024

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

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

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

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 Certification Exam

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 Certification Exam

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
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

FARM TECHNICIAN

Provincial Certification Exam

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Performs Safety-Related Functions	8
2	Uses Tools and Equipment	8
3	Uses Communication and Mentoring Techniques	4
4	Operates and Maintains Farm Equipment	22
5	Maintains Facilities, Grounds and Infrastructure	6
6	Performs Farm Management Practices	12
7	Performs Production Tasks	30
8	Prepares Product for Sale or Distribution	10
		100%

Date: December 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	10%
3	Basic Electricity	11%
4	Advanced Electricity (Gas Fitter 1)	10%
5	Basic Piping and Tubing Systems and Piping and Tubing Systems for Industrial and Commercial Applications	6%
6	Technical Manuals, Specifications, Schematics, Drawings and Graphs and Introduction to Gas Appliances	2%
7	Controls	15%
8	The Building as a System	6%
9	Pressure Regulators, Meters and Fuel Containers	7%
10	Venting Practices	6%
11	Flame Safeguard	16%
12	Valve Trains and Burners	8%
	TOTAL:	100%

Date: January 2024

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	20%
2	Basic Piping and Tubing Systems	40%
3	Piping and Tubing Systems for Industrial and Commercial Applications	30%
4	Pressure Regulators, Meters and Fuel Containers	10%
	TOTAL:	100%

Date: January 2023

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

HEAVY DUTY EQUIPMENT TECHNICIAN

Harmonized Level 3

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	Cooling Systems	4
2	Engine Lubrication Systems	5
3	Drivelines	3
4	Drive Axle Assemblies	9
5	Engine Clutches	6
6	Diesel Fuel Supply Systems	6
7	Starting Systems	8
8	Starting Aids	3
9	Charging Systems	8
10	Electronic Ignition Systems	4
11	Non-Diesel Fuel Systems	10
12	Manual Transmissions	12
13	Pump Drives/Power Take Offs	3
14	Transfer Cases	3
15	Automatic/Power Shift and CVT Transmissions	12
16	Torque Converters	4
		100

Date: July 2022

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)

Harmonized Level 4

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Prime Movers	20
2	Conveying Systems	20
3	Preventative and Predictive Maintenance	14
4	Vibration Analysis	7
5	Balancing	6
6	Non-Destructive Testing	10
7	Fluid Analysis	6
8	Commissioning and Decommissioning	10
9	Robotics and Automated Equipment	4
10	Mentoring	3
	TOTAL:	100%

Date: July 2022

INSTITUTIONAL COOK

Level 1

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	Introduction to the Cooking Industry	4%
2	Personal Hygiene, Kitchen Sanitation and Food Safety	5%
3	Health and Safety	5%
4	Tools and Equipment	4%
5	Weights and Measures	4%
6	Cooking Principles	4%
7	Receiving and Storage	4%
8	Vegetables and Fungi	5%
9	Potatoes	5%
10	Pulses, Grains, Seeds and Nuts	5%
11	Dry Pasta and Noodles	6%
12	Fruits	5%
13	Salads	5%
14	Sandwiches	5%
15	Eggs, Dairy and Alternative Products	5%
16	Introduction to Baking	4%
17	Bread Products	5%
18	Egg and Breakfast Cookery	6%
19	Stocks and Broths	6%
20	Fin Fish I	5%
21	Introduction to Poultry	3%
	TOTAL:	100%

Date: September 2024

INSTITUTIONAL COOK

Provincial Certification Exam

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Hygiene, sanitation and safety	10
2	Common occupational skills	8
3	Produce	8
4	Stocks, broths and soups	9
5	Sauces	7
6	Cheese, dairy, plant-based dairy alternatives, eggs and egg products	7
7	Pastas, noodles and dumplings	4
8	Grains, pulses, seeds, nuts and alternative proteins	9
9	Meats, poultry and variety meats	13
10	Fish and seafood	10
11	Salads and sandwiches	5
12	Specialty preparation	3
13	Sweet and savoury baked goods and desserts	7
	TOTAL:	100%

Date: January 2024

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

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

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	10%
2	Tools and Equipment	8%
3	Work Scheduling and Materials	3%
4	Communication	1%
5	Math for Insulators	15%
6	Substrates	5%
7	Introduction to Industrial Applications	8%
8	Piping and Fittings I	8%
9	Commercial Applications	8%
10	Plumbing and Mechanical Piping I	8%
11	Fire Stop Systems I	2%
12	Fireproofing I	1%
13	Asbestos Abatement	10%
14	Asbestos Removal	5%
15	Asbestos Maintenance and Repair	2%
16	Lead Abatement and Mould Remediation	1%
17	Hot Work	5%
	TOTAL:	100%

Date: November 2021

INSULATOR (HEAT AND FROST)

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	10
2	Tank, Vessel and Equipment I	12
3	Plumbing and Mechanical Piping II	12
4	Mechanical Ducting I	12
5	Mechanical Equipment I	10
6	Soundproofing	2
7	Underground Systems	6
8	Sealers Coatings and Spray-On Insulation	10
9	Refractory Systems	4
10	Cryogenic Systems	6
11	Trade Practices I	16
	TOTAL:	100%

Date: July 2022

INSULATOR (HEAT AND FROST)

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	Piping and Fittings II	18%
2	Tank, Vessel and Equipment II	16%
3	Mechanical Ducting II	12%
4	Mechanical Equipment II	12%
5	Removable Soft Covers	8%
6	Specifications and Drawings	15%
7	Marine Applications	5%
8	Trade Practices II	14%
	TOTAL:	100%

Date: August 2024

MACHINIST

Harmonized Level 1

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	Safety	3
2	Communication	1
3	Hoisting, Lifting and Rigging	2
4	Drawings	8
5	Precision Measurement I	6
6	Hand and Power Tools	4
7	Introduction to Grinding Machines	4
8	Hand Threading	4
9	Power Saws	4
10	Fluids and Coolants	1
11	Introduction to Layout	4
12	Drills and Drill Presses	5
13	Introduction to Conventional Lathes Set Up	8
14	Basic Lathe Operation	18
15	Introduction to Milling Machines	10
16	Machinable Material	4
17	Material Testing	3
18	Abrasive Finishing	3
19	Introduction to Mechanical Components	4
20	Heating and Bending Processes	3
21	Mentoring I	1
	TOTAL:	100%

Date: August 2023

MACHINIST

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Heat Treatment	6%
2	Reconditioning/Refurbishment	4%
3	Surface Grinders	6%
4	Precision Measurement II	4%
5	Advanced Conventional Lathe Operations	24%
6	Vertical Milling Machine Set Up/Operation	25%
7	Taper Turning	6%
8	Introduction to CNC Programming	7%
9	Introduction to CNC Machine Set Up	8%
10	Introduction to CNC Machine Operation	10%
	TOTAL:	100%

Date: August 2024

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

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	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 Certification Exam

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

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

METAL FABRICATOR (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	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

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

OIL HEAT SYSTEM 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	NUMBER OF QUESTIONS ON EXAM
1	Safety Awareness	3
N/A	Communications	0
2	Trade Practices and Related Documents	3
3	Tools and Equipment	4
4	Basic Hoisting, Rigging and Lifting	4
5	Access Equipment	3
6	Drawings and Specifications	7
7	Trade Math	3
8	Soldering, Flaring and Threading Pipe	8
9	Fuel Oil Properties	3
10	Combustion Theory	7
11	Air-Handling Components	3
12	Combustion Efficiency Testing	10
13	Fuel Storage Systems	12
14	Electricity I (Principles of Electricity)	14
15	House as a System	14
16	Mentoring I	2
	TOTAL	100 Questions

Date: September 2024

OIL HEAT SYSTEM TECHNICIAN

Level 2

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	NUMBER OF QUESTIONS ON EXAM
1	Electricity 1 (Principles of Electricity)	19
2	Electricity 2 (Ignition Systems, Electrical Devices and Switches)	20
3	Electricity 3 (Electronics and Solid State) / Motors	18
4	Controls and Wiring	27
5	Combustion Chambers / Chimneys, Venting and Draft Control	16
	TOTAL	100 Questions

Date: March 2024

OIL HEAT SYSTEM TECHNICIAN

Level 3

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	NUMBER OF QUESTIONS ON EXAM
1	Hydronic Heating Systems	25
2	Warm Air Furnaces / Steam Systems	20
3	Domestic Hot Water Heaters / Zoning	23
4	House as a System / Retrofit	21
5	Specialized Systems / Service & Troubleshooting	6
TOTAL		95 Questions

Date: March 2024

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
1	Safety	7
2	Tools and Equipment	6
3	Access Equipment	4
4	Hoisting, Lifting and Rigging	4
5	Welding, Fuel Brazing and Cutting	5
6	Plastic Piping	9
7	Copper Pipe Tube and Tubing	10
8	Steel Piping	10
9	Cast Iron Piping	7
10	Drainage, Waste and Venting Systems I	17
11	Drawings I	8
12	Communication Techniques	2
13	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

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

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	Bonding and Grounding	4
3	Tools and Equipment	6
4	Work Planning	2
5	Work Area Access	2
6	DC Electricity	12
7	Single-Phase AC Theory	12
8	Single-Phase AC Circuits I	20
9	Introduction to Live-Line Methods	6
10	Communication Techniques	2
11	Pole Structures	10
12	Steel Lattice Structures I	2
13	Introduction to Single-Phase Transformers	6
14	Communication Lines	2
15	Non-Tension Stringing	4
16	Sag Conductors	2
17	Overhead Conductors and Cable Tie-Ins	2
18	Splices and Connections	2
		100

Date: May 2023

POWERLINE TECHNICIAN

Non-harmonized 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

POWERLINE TECHNICIAN

Harmonized Level 2

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Single-Phase AC Circuits II	20
2	Live-Lines I	12
3	Tension Stringing	6
4	Secondary Underground and Underwater Cable	10
5	Lighting Systems	5
6	Single-Phase Transformers	10
7	Single-Phase Switches	3
8	Protection Equipment I	7
9	Secondary Metering Equipment	5
10	Introduction to Distribution Systems	3
11	Distribution and Transmission Systems Maintenance I	3
12	Overhead Distribution Systems Repair I	6
13	Underground and Underwater Distribution Systems Repair I	4
14	Overhead Transmission Systems Repair I	3
15	Underground and Underwater Transmission Systems Repair I	3
		100

Date: August 2024

POWERLINE TECHNICIAN

Non-harmonized Level 2

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	NUMBER OF QUESTIONS ON EXAM
1	Magnetism	6
2	Electromagnetism	9
3	AC Properties	30
4	Power Factor	9
5	Single-Phase Revenue Metering	10
6	Switches and Protective Devices	12
7	Live Lines	9
8	Street Lighting	3
9	System Operating Practices	3
10	Personal Protective Equipment	5
11	Diagram Symbols	4
	TOTAL:	100

Date: 2015

REFRIGERATION & AIR CONDITIONING MECHANIC

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	Access Equipment	1
4	Hoisting, Lifting and Rigging	4
5	Refrigeration Fundamentals	10
6	Refrigerants, Gases and Oils	9
7	Compressors I	5
8	Valves and Accessory Devices	5
9	Piping, Tubing, Soldering and Brazing	9
10	Leak Testing, Evacuation and Charging	9
11	Electrical Fundamentals	10
12	Motors I	7
13	Trade Documentation	3
14	Basic Refrigeration and Air Conditioning Installation	10
15	Basic System Maintenance	5
16	Control Fundamentals	4
17	Communications	1
18	Workplace Mentoring I	1
		100

Date: July 2022

REFRIGERATION & AIR CONDITIONING MECHANIC

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 and Specifications	3
2	Pressure Enthalpy Diagrams	7
3	Evaporators	8
4	Compressors II	8
5	Condensers	8
6	Metering Devices	8
7	Refrigerant Flow Controls and Accessory Devices	9
8	Air Conditioning Fundamentals	8
9	Fans, Mechanical Drives, Air Filters and Air Cleaners	8
10	Control Systems I	9
11	Motors II	9
12	Control Circuits and Wiring Diagrams	9
13	Refrigerant Recovery Techniques	6
		100

Date: May 2023

REFRIGERATION & AIR CONDITIONING MECHANIC

Harmonized Level 3

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Refrigeration Load Calculations	9
2	Refrigeration System Design	9
3	Compressors III (Large Commercial/Industrial Compressors)	10
4	Evaporative Condensers and Cooling Towers	6
5	Fluid Dynamics and Circulating Pumps	5
6	Commercial Refrigeration Systems	11
7	Air Conditioning Systems	10
8	Packaged Air Conditioning Units	10
9	Heat Pump Systems	10
10	Control Systems II	10
11	Troubleshooting Refrigeration and Air Conditioning Electronics	10
		100

Date: March 2024

RESTORATION STONE MASON

Provincial Certification Exam

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

New 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.

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1.	Safety	10%
2.	Tools and Equipment	8%
3.	Kettles and Burners	9%
4.	Blueprints and Drawings	10%
5.	Communication and Trade Documentation	1%
6.	Hoisting, Lifting and Rigging	9%
7.	Access Equipment	5%
8.	Roofing Materials	14%
9.	Introduction to Roof Structures & Components	8%
10.	Worksite Preparation	9%
11.	Asphalt Shingles	6%
12.	Built-up Roofing Membranes	10%
13.	Workplace Mentoring I	1%
		100%

Date: September 2022

ROOFER

New 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	11%
2	Motorized Equipment	9%
3	Roof Deck Preparation	25%
4	Modified Bitumen Membranes	11%
5	Cold Process and Hot Rubberized Membranes	9%
6	Low Slope Roofs	21%
7	Wood and Composite Shingles	6%
8	Waterproofing and Damp-proofing	8%
	TOTAL:	100%

Date: January 2024

ROOFER

Level 3

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

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	10
2	Tools and Equipment	10
3	Sheet Metal Math Fundamentals	10
4	Communication and Trade Documentation	2
5	Gas Metal Arc Welding (GMAW) I	8
6	Resistance Spot Welding	2
7	Oxy-Fuel and Plasma Arc Cutting	6
8	Soft Soldering	4
9	Stationary and Mobile Work Platforms	4
10	Hoisting, Rigging and Positioning Equipment	10
11	Metallurgy	6
12	Pattern Development (Simple and Straight Line)	13
13	Fabrication and Installation Fundamentals	15
		100

Date: September 2022

SHEET METAL WORKER

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	Drawings I	10
2	Hard Soldering and Brazing	1
3	Parallel Line Development (Round Duct Fittings)	10
4	Radial Line Development (Right Cones)	10
5	Triangulation (Plan View)	10
6	Shielded Metal Arc Welding (SMAW)	10
7	Gas Metal Arc Welding (GMAW) II	4
8	Design and Field Modification	6
9	Architectural Metal Systems	10
10	Chimneys, Breeching and Venting	6
11	Air Quality Management	6
12	Air Handling Systems I	15
13	Exterior Components	2
		100

Date: September 2023

SHEET METAL WORKER

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

Percentage of Questions

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Parallel Line Development (Architectural Applications)	9%
2	Radial Line Development (Oblique Fittings)	8%
3	Triangulation (From Elevation)	10%
4	Duct System Design	15%
5	Gas Tungsten Arc Welding (GTAW)	12%
6	Specialty Products	10%
7	Air Handling Systems II	6%
8	Introduction to Testing and Balancing	10%
9	Electrical Principles	10%
10	System Maintenance and Repair	10%
		100%

Date: August 2024

SHEET METAL WORKER

New Level 4

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Pattern Development (Computer Technology)	5%
2	Material Handling Systems	20%
3	Thermal Insulation, Lagging/Cladding and Flashing	5%
4	Testing, Adjusting and Balancing (TAB)	27%
5	Commissioning	5%
6	Job Planning	13%
7	Drawings 2	21%
8	Mentoring	4%
		100%

Date: January 2022

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

SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Portable Fire Extinguishers	4
2	Fire Pumps & Controllers	12
3	Private Water Supply Systems	8
4	Drawings III	8
5	Commissioning Water Supply Systems II	5
6	Commissioning Fire Protections Systems II	7
7	Mentoring Techniques	5
8	Dry and Wet Chemical Extinguishing Systems	5
9	Water Mist and Hybrid Extinguishing Systems	5
10	Foam Extinguishing Systems	6
11	Carbon Dioxide Extinguishing Systems	4
12	Clean Agent Extinguishing Systems	4
13	Fire Protection Systems Repair and Maintenance	13
14	Fire Protection Systems and Portable Fire Extinguishers Inspection and Testing	9
15	Job Planning	5
		100

Date: March 2022

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

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

TRANSPORT TRAILER 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.

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: February 2023

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

TRUCK AND TRANSPORT MECHANIC

Harmonized Level 3

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	Cooling Systems	4
2	Engine Lubrication Systems	5
3	Drivelines	3
4	Drive Axle Assemblies	9
5	Engine Clutches	6
6	Diesel Fuel Supply Systems	6
7	Starting Systems	8
8	Starting Aids	3
9	Charging Systems	8
10	Electronic Ignition Systems	4
11	Non-Diesel Fuel Systems	10
12	Manual Transmissions	12
13	Pump Drives/Power Take Offs	3
14	Transfer Cases	3
15	Automatic/Power Shift and CVT Transmissions	12
16	Torque Converters	4
		100

Date: July 2022

TRUCK AND TRANSPORT MECHANIC

Harmonized Level 4

SECTIONS AND EXAM WEIGHTING

SECTION	TITLE	NUMBER OF QUESTIONS ON EXAM
1	Base Engine Diagnostics	6
2	Diesel Fuel Injection Systems	10
3	Electronically-Controlled Diesel Fuel Injection Systems	15
4	Intake and Exhaust Systems	6
5	Emission Control Systems	18
6	Engine Brakes and Retarders	6
7	Diesel Engine Overhaul	10
8	Gauges and Instrumentation	2
9	Vehicle Management Systems	18
10	Air Conditioning Systems	5
11	Heating and Ventilation Systems	3
12	Mentoring	1
		100

Date: March 2024

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

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