



**APPRENTICESHIP**  
NOVA SCOTIA



**NOVA SCOTIA**  
Labour and Advanced Education



**EXAM COUNSELLING SHEETS**  
*for*  
**PROVINCIAL AND LEVEL EXAMS**

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## EXAM COUNSELLING SHEETS 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. **NOTE:** For *Interprovincial* (IP) exam counselling sheets, please see the Red Seal website: [www.red-seal.ca/c.4nt.2nt%40-eng.jsp?cid=29](http://www.red-seal.ca/c.4nt.2nt%40-eng.jsp?cid=29)

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# ALARM AND SECURITY TECHNICIAN

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

Revised: May 09, 2008

**This examination requires the use of the 2006 Canadian Electrical Code 20th edition.**

# AUTOGLASS TECHNICIAN

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Jan 1, 2011

# AUTOMOTIVE SERVICE TECHNICIAN

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Fundamental Skills	20%
2	Chassis Systems 1	16%
3	Basic Welding	13%
4	Electrical and Electronics Systems 1	19%
5	Non-ABS Brake Systems	18%
6	Maintenance, Inspection and Body Adjustment	14%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 14, 2012

# AUTOMOTIVE SERVICE TECHNICIAN

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Engine Principles and Fuel Delivery Systems	17%
2	Engine Cooling and Lubrication	17%
3	Starting and Charging Systems	17%
4	Lighting and Wiper Systems	14%
5	Ignition Systems	16%
6	Chassis Systems 2	19%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** April 24, 2012

# AUTOMOTIVE SERVICE TECHNICIAN

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Final Drive Systems	16%
2	Vehicle Alignment	12%
3	Gasoline Fuel Systems	17%
4	Vehicle Management Systems	16%
5	Intake and Emission Systems/Vehicle Inspection	15%
6	Alternate Fuels and Energy Sources	12%
7	ABS Brake and Restraint Systems	12%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** April 24, 2012

# AUTOMOTIVE SERVICE TECHNICIAN: SERVICE STATION MECHANIC

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety and General Trade Knowledge	12%
2	Suspension and Tires	12%
3	Electrical Systems	20%
4	Brakes	16%
5	Steering and Alignment	12%
6	Engine Systems	20%
7	Drivelines	8%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Oct 17, 2001

# AUTOMOTIVE SERVICE TECHNICIAN: FRONT END AND BRAKES

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety and General Trade Knowledge	16%
2	Suspension and Tires	16%
3	Steering	16%
4	Alignment	16%
5	Brakes	28%
6	Exhaust	8%
	<b>TOTAL:</b>	<b>100%</b>

Revised: October 19, 2001

# AUTOMOTIVE SERVICE TECHNICIAN: TRANSMISSION

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety and General Trade Knowledge	17%
2	Steering and Suspension	6%
3	Differentials, Drive Shafts & Drive Axles	7%
4	Manual Transmissions/Transaxles & Transfer Cases	25%
5	Torque Converters	8%
6	Automatic Transmissions/Transaxles	21%
7	Clutches	6%
8	Electrical	10%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Dec 18, 2002

# BLASTER

## BLASTING SAFETY

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** July 9, 2010

# BLASTER

## BLASTER – FIRST CLASS (THEORETICAL)

### SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Definition of Terms	55%
2	Acceptable and Unacceptable Practices	45%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Dec 22, 2010

**Note:** This is a two part exam. See Practical breakdown on next page.

# BLASTER

## BLASTER – FIRST CLASS (PRACTICAL)

### SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Practical Questions	100%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Dec 22, 2010

**Note:** This is a two part exam. See Theoretical breakdown on previous page.

# BLASTER

## BLASTER – SECOND CLASS

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Definition of Key Terms	21%
2	Trade Practices	62%
3	Problem Solving	17%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Aug 12, 2008

# BLASTER

## BLASTER – THIRD CLASS

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Definition of Key Terms	18%
2	Trade Practices	55%
3	Problem Solving	27%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Aug 12, 2008

# BOILERMAKER

## ENTRY LEVEL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	General Safety	20%
2	Basic Rigging	20%
3	Tools, Cutting & Welding	34%
4	Material Knowledge	26%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 23, 2001

# BOILERMAKER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Tools, Cutting & Welding	36%
2	Blueprint Reading	47%
3	General Rigging	17%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 23, 2001

# BOILERMAKER

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Heat Treatment	9%
2	Communications and Related Knowledge	4%
3	Wire Rope Drums	3%
4	Advanced Block and Tackle	7%
5	Cranes	8%
6	Hoisting and Jacking Equipment	8%
7	Scaffold	7%
8	Mathematics	11%
9	Drawing Interpretation	12%
10	Layout and Fabricating	17%
11	Fibreglass Fitting	14%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Feb 11, 2009

# BOILERMAKER

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Materials & Related Knowledge	15%
2	Layout & Fitting	28%
3	Trade Related Components	57%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 23, 2001

# BRICKLAYER / RESTORATION STONE MASON

## LEVEL 1 (New Group A)

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety, Rigging and Scaffolding	14%
2	Introduction to National Building Code / Tools and Equipment	19%
3	Masonry Units / Anchors, Ties and Joint Reinforcement	18%
4	Mortars, Grouting and Parging	15%
5	Laying Brick and Block to Line	14%
6	Blueprint Reading / Leads	20%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Apr 30, 2010

# BRICKLAYER / RESTORATION STONE MASON

## LEVEL 2 (New Group B)

### SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1.	Concrete Block Foundations	12%
2.	Concrete Block Walls	17%
3.	Reinforced Masonry Partitions	15%
4.	Non-Load Bearing / Load Bearing Walls	18%
5.	Cavity / Composite Walls	13%
6.	Stone Masonry / Restoration / Repair and Repointing	13%
7.	Wall Extensions and Openings	12%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Apr 30, 2010

# CARPENTER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Construction Safety	2%
2	Introduction to Building Materials	26%
3	Carpentry Tools	18%
4	Foundations	28%
5	Framing	22%
6	Construction Blueprints	4%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Aug 31, 2011

# CARPENTER

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Gable Roofs	20%
2	Equal Sloped Hip Roofs	17%
3	Intersecting Roofs of Equal Slope	13%
4	Windows and Doors	25%
5	Exterior Siding / Cladding	25%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Nov 29, 2011

# COMMUNICATIONS CABLING SPECIALIST

## PROVINCIAL

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Jan 6, 2012

**This examination requires the use of the 2009 Canadian Electrical Code, 21st Edition.**

# COOK

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Health and Safety	16%
2	Basic Cooking Principles	16%
3	Vegetables and Starch Cookery	26%
4	Cold Kitchen 1	14%
5	Baking and Desserts 1	16%
6	Egg and Breakfast Cookery	12%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** April 15, 2009

# COOK

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Stocks and Soups	16%
2	Sauces	17%
3	Meat, Poultry and Game Cutting	14%
4	Meat, Poultry and Game Preparation	16%
5	Fish and Seafood	17%
6	Baking and Desserts 2	20%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Aug 31, 2011

# COOK

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Cold Kitchen 2	20%
2	Baking and Desserts 3	22%
3	Food Service Management 1 (Costing)	20%
4	Food Service Management 2A (Nutrition)	18%
5	Food Service Management 2B (Menu)	20%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Aug 31, 2011

# ELECTRICIAN: CONSTRUCTION / INDUSTRIAL

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety Practices / Building Codes	14%
2	Generic Blueprint	17%
3	Tools and Equipment	18%
4	DC Theory / Series and Parallel Circuits	9%
5	Conductors, Cables and Voltage Drop	15%
6	Raceway Installation	10%
7	Fundamental Wiring	17%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** May 04, 2009

**This examination requires the use of the 2006 Canadian Electrical Code 20th edition.**

# ELECTRICIAN: CONSTRUCTION / INDUSTRIAL

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Single-Phase Theory I	15%
2	Single-Phase Theory II	15%
3	Three-Phase Theory /Distribution Systems Conditioning	18%
4	Distribution Equipment / Protective Devices	16%
5	Lighting and Controls	10%
6	Heating Systems	11%
7	Single-Phase Service Entrance	15%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Dec 2, 2009

**This examination requires the use of the 2006 Canadian Electrical Code 20th edition.**

# ELECTRICIAN: CONSTRUCTION / INDUSTRIAL

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	High-Voltage Systems	12%
2	Transformers	12%
3	DC Machines & Controls	12%
4	AC Generators / Three-Phase Motors	8%
5	Single-Phase Motors	29%
6	Motor Starters / Control Devices	12%
7	Three-Phase Service Entrance	15%
	<b>TOTAL:</b>	<b>100%</b>

Revised: May 04, 2009

**This examination requires the use of the 2006 Canadian Electrical Code 20th edition.**

# GAS FITTER

## GAS FITTER I

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Flame Safeguard	34%
2	Commercial and Industrial Appliances over 400 MBTU/H (120 kW) and Commercial Cooking Equipment	24%
3	Gas Fired Air Conditioning	7%
4	Electricity	10%
5	Controls	10%
6	Valve Trains and Burners	15%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Nov 29, 2011

**This examination requires the use of:**

- B149.1-10 Natural Gas and Propane Installation Code
- B149.2-10 Propane Storage and Handling Code

# GAS FITTER

## GAS FITTER II

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Piping and Tubing Systems for Industrial and Commercial Applications	6%
2	Electricity	12%
3	Controls	7%
4	The Building as a System	8%
5	Domestic Appliances	4%
6	Pressure Regulators, Meters & Fuel Containers	6%
7	Domestic Gas-Fired Refrigerators	1%
8	Conversion Burners	8%
9	Water Heaters & Combination Systems	6%
10	Forced Warm-Air Heating Systems	2%
11	Hydronic Heating Systems	5%
12	Space Heaters & Decorative Appliances	2%
13	Venting Practices	12%
14	Forced Air Add-on Devices	4%
15	Air Handling	4%
16	Liquid Propane	12%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Nov 29, 2011

**This examination requires the use of the B149.1-10 Natural Gas and Propane Installation Code.**

# GAS FITTER

## GAS FITTER III

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety	3%
2	Fasteners, Hand and Power Tools, and Testing Instruments	5%
3	Properties, Characteristics and Safe Handling of Fuel Gases	16%
4	Utilization Codes, Acts and Regulations	20%
5	Introduction to Electricity	20%
6	Technical Manuals, Specifications, Schematics, Drawings and Graphics	3%
7	Introduction to Piping and Tubing Systems	21%
8	Introduction to Gas Appliances	12%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Nov 29, 2011

**This examination requires the use of the B149.1-10 Natural Gas and Propane Installation Code.**

# GAS FITTER

## 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%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Mar 11, 2011

**This examination requires the use of:**

- B149.1-10 Natural Gas and Propane Installation Code
- B149.2-10 Propane Storage and Handling Code
- B149.3-10 Code for the Field Approval of Fuel-related Components on Appliances and Equipment

# GAS FITTER

## G7

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Mar 11, 2011

**This examination requires the use of the B149.1-10 Natural Gas and Propane Installation Code.**

# HEAVY DUTY EQUIPMENT TECHNICIAN

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Fundamental Shop Skills	10%
2	Basic Electrical/Electronic Principles	14%
3	Hydraulics 1	15%
4	Lubricants, Lubrication and Cooling	14%
5	Braking Systems	17%
6	Engine Principles	16%
7	Basic Welding	14%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Nov 29, 2011

# HEAVY DUTY EQUIPMENT TECHNICIAN

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 14, 2012

# INSTRUMENTATION AND CONTROL TECHNICIAN

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Tools and Fasteners	8%
2	Direct Current Theory	12%
3	Series and Parallel Circuits	12%
4	Building Codes	12%
5	Voltage Drop and Power Loss	12%
6	Single Phase Theory	12%
7	Three Phase Theory	12%
8	Conduit, Tubing, and Fittings	12%
9	Troubleshooting Techniques	8%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Nov 28, 2003

**This examination requires the use of the 2006 Canadian Electrical Code 20th edition.**

# INSTRUMENTATION AND CONTROL TECHNICIAN

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Electronics	24%
2	Hydraulic Systems	8%
3	Motors	12%
4	On-Off Control	20%
5	Process Measurement	36%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Nov 28, 2003

# INSTRUMENTATION AND CONTROL TECHNICIAN

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Pneumatic Systems	12%
2	Solid State Drives	16%
3	Control Valves	16%
4	Process Control	32%
5	Process Analyzers	16%
6	Vibration	8%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Nov. 28, 2003

# INSTRUMENTATION AND CONTROL TECHNICIAN

## LEVEL 4

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Boiler Control	16%
2	DCS Control Systems	12%
3	DCS Process Applications	16%
4	PLC Fundamentals	12%
5	PLC Process Applications	16%
6	Programming PLC's	12%
7	Signal Transmission	16%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Dec 22, 2008

# INDUSTRIAL MECHANIC (MILLWRIGHT)

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Shop Tools	17%
2	Power Tools	16%
3	Blueprint Reading and Sketching	17%
4	Rigging	15%
5	Metallurgy	9%
6	Machine Shop Fundamentals	12%
7	Oxy-Fuel / Electric Arc Welding	14%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Nov 12, 2009

# INDUSTRIAL MECHANIC (MILLWRIGHT)

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Static and Dynamic Seals	16%
2	Bearings and Lubrication	13%
3	Couplings and Clutches	14%
4	Gear Drive Units	15%
5	Conveyors (Material Handling Systems)	14%
6	Sheaves and Sprockets	18%
7	Equipment and Mechanical Installation Blueprint	10%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Aug 31, 2011

# INDUSTRIAL MECHANIC (MILLWRIGHT)

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Pumps (Positive and Non-positive)	20%
2	Fluid Power 1 (Basic Hydraulics, Schematics and Components)	15%
3	Fluid Power 2 (Controls, Circuits and Testing)	14%
4	Pneumatics	15%
5	Compressors	19%
6	Internal Combustion Engines / Basic Electricity	17%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Aug 31, 2011

# INDUSTRIAL MECHANIC (MILLWRIGHT)

## LEVEL 4

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Aug 31, 2011

# INSULATOR (HEAT AND FROST)

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety Measures in Construction	12%
2	Hand and Power Tools	2%
3	Shop Tools and Equipment	2%
4	Math for Insulators	16%
5	Insulation Principles	7%
6	Insulation Materials	5%
7	Insulation Practices	4%
8	Introduction to Pipe and Piping Systems	5%
9	Installing Pipe Insulation	19%
10	Hot Work Practices	10%
11	Introduction to Asbestos	10%
12	Asbestos Removal Procedures – Part 1	8%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Dec 16, 2010

# INSULATOR (HEAT AND FROST)

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Apr 4, 2012

# MACHINIST

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** July 9, 2010

# OIL HEAT SYSTEM TECHNICIAN

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Fundamental Skills	24%
2	Tools and Equipment / Soldering, Flaring and Threading	11%
3	Fuel Storage	11%
4	Fuel Delivery Systems	22%
5	Planned Maintenance / Trade Practice	16%
6	Combustion and Air Handling	16%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** May 04, 2009

**This examination requires the use of the Installation Code for Oil Burning Equipment, B-139-04.**

# OIL HEAT SYSTEM TECHNICIAN

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Electricity 1 (Principles of Electricity)	17%
2	Electricity 2 (Ignition Systems, Electrical Devices and Switches)	22%
3	Electricity 3 (Electronics and Solid State) / Motors	19%
4	Controls and Wiring	25%
5	Combustion Chambers / Chimneys, Venting and Draft Control	17%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** May 04, 2009

**This examination requires the use of the Installation Code for Oil Burning Equipment, B-139-04.**

# OIL HEAT SYSTEM TECHNICIAN

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Hydronic Heating Systems	23%
2	Warm Air Furnaces / Steam Systems	25%
3	Domestic Hot Water Heaters / Zoning	24%
4	House as a System / Retrofit	22%
5	Specialized Systems / Service & Troubleshooting	6%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** May 04, 2009

**This examination requires the use of the Installation Code for Oil Burning Equipment, B-139-04.**

# PLUMBER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety / Tools and Equipment	14%
2	Blueprint Reading and Interpretation 1 (Basic Residential)	14%
3	Pipe, Fittings and Piping Assembly 1A (Ferrous)	14%
4	Pipe, Fittings and Piping Assembly 1B (Non-Ferrous)	14%
5	Draining and Venting Systems 1A (Residential)	15%
6	Draining and Venting Systems 1B (Residential)	15%
7	Water Supply 1 (Water Service / Rough-In)	14%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Aug. 20, 2009

**This examination requires the use of the 2005 National Plumbing Code.**

# PLUMBER

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1	Blueprint Reading and Interpretation 2 (Advanced Residential / Commercial)	16%
2	Basic Electricity	16%
3	Hydronic Heating 1 (Basic)	18%
4	Drainage and Venting Systems 2A (Storm Systems) / Soldering and Brazing	18%
5	Specialty Piping Applications / Pipe, Fittings and Piping Assembly 2	16%
6	Drainage and Venting Systems 2B (Commercial Drainage)	16%
	<b>TOTAL:</b>	<b>100%</b>

Revised: April 30, 2010

**This examination requires the use of the 2005 National Plumbing Code.**

# POWERLINE TECHNICIAN

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** Nov 30, 2010

# REFRIGERATION AND AIR CONDITIONING MECHANIC

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

Revised: March 05, 2009

# RESTORATION STONE MASON / BRICKLAYER

## LEVEL 1 (New Group A)

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety, Rigging and Scaffolding	14%
2	Introduction to National Building Code / Tools and Equipment	19%
3	Masonry Units / Anchors, Ties and Joint Reinforcement	18%
4	Mortars, Grouting and Parging	15%
5	Laying Brick and Block to Line	14%
6	Blueprint Reading / Leads	20%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Apr 30, 2010

# RESTORATION STONE MASON / BRICKLAYER

## LEVEL 2 (New Group B)

### SECTIONS AND EXAM WEIGHTING

SECTION	TOPIC	PERCENTAGE OF QUESTIONS ON EXAM
1.	Concrete Block Foundations	12%
2.	Concrete Block Walls	17%
3.	Reinforced Masonry Partitions	15%
4.	Non-Load Bearing / Load Bearing Walls	18%
5.	Cavity / Composite Walls	13%
6.	Stone Masonry / Restoration / Repair and Repointing	13%
7.	Wall Extensions and Openings	12%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Apr 30, 2010

# RESTORATION STONE MASON

## PROVINCIAL (RESTORATION STONE MASON ONLY)

### SECTIONS AND EXAM WEIGHTING

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

**Revised:** October 21, 2009

# ROOFER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Roofing Methods and Procedures	27%
2	Safety	33%
3	Estimating	11%
4	General Knowledge	15%
5	Equipment	14%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** May 3, 2012

# SHEET METAL WORKER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Mathematics 1	9%
2	Safety Awareness	4%
3	Communication	1%
4	Tools and Equipment	8%
5	Elevating Devices	4%
6	Metallurgy	8%
7	Drafting	4%
8	Introduction to Gas Metal Arc Welding (GMAW)	10%
9	Plasma Arc Cutting	1%
10	Soldering	4%
11	Pattern Development and Layout	16%
12	Simple Layout	20%
13	Fabrication Fundamentals	11%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Mar 11, 2011

# SHEET METAL

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Blueprint 1	17%
2	Pattern Development 2 (Parallel Line)	15%
3	Pattern Development 2 (Radial Line)	15%
4	Pattern Development 2 (Triangulation)	15%
5	Welding 2	9%
6	Air Handling Systems	29%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Apr 5, 2011

# SHEET METAL

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Mathematics	12%
2	Blueprint Reading	24%
3	Welding	13%
4	HVAC	27%
5	Rigging	12%
6	Pattern Development	12%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Apr 4, 2012

# SPRINKLER SYSTEM INSTALLER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Hand and Power Tools	6%
2	Mathematics 1	9%
3	Science 1	5%
4	Blueprint Reading and Sketching 1	6%
5	Steel Pipe and Joining Techniques	10%
6	Plastic Pipe and Fittings	5%
7	Rigid Copper Pipe and Flexible Tubing	3%
8	Control Valves	5%
9	Hangers, Supports and Bracing	9%
10	Rigging and Hoisting	4%
11	Access Equipment	5%
12	Sprinkler Heads 1	11%
13	Wet Pipe Sprinkler Systems	8%
14	Dry Pipe Sprinkler Systems	8%
15	Anti-freeze Sprinkler Systems	6%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Dec 2, 2009

This examination requires the use of the Standard for the Installation of Sprinkler Systems 2007 Edition, NFPA 13.

# SPRINKLER SYSTEM INSTALLER

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Blueprint Reading & Sketching II	9%
2	Mathematics II	12%
3	Science II	6%
4	Piping Practices	14%
5	Sprinkler Heads II	12%
6	Water Supply, Hydrants and Fire Department Connections	10%
7	Stand Pipe, Hose & Portable Extinguisher Systems	9%
8	Copper Brazing, Soldering and Oxy- acetylene Cutting	3%
9	Trim I, Alarm & Dry Pipe Valves	9%
10	Inspection, Testing and Maintenance	9%
11	Report Writing and Communications	7%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** April 15, 2010

**This examination requires the use of the Standard for the Installation of Sprinkler Systems 2007 Edition, NFPA 13.**

# STEAMFITTER / PIPEFITTER

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Safety, Tools and Equipment	21%
2	Blueprint Reading and Interpretation 1 (Basic / Residential)	18%
3	Pipe, Fittings and Piping Assembly 1A (Ferrous)	18%
4	Pipe, Fittings and Piping Assembly 1B (Non-Ferrous)	20%
5	Pipe, Fittings & Piping Assembly 2	23%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** June 7, 2010

# STEAMFITTER / PIPEFITTER

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Blueprint Reading and Interpretation 2 (Advanced Residential / Commercial)	17%
2	Hydronic Heating 1 (Residential)	17%
3	Introduction to Electricity	18%
4	Blueprint Reading and Interpretation 3 (Commercial / Industrial)	13%
5	Fuel / Electric Welding and Cutting	17%
6.	Specialty Piping Applications	18%
	<b>TOTAL:</b>	<b>100%</b>

Revised: Feb 18, 2011

# STEAMFITTER / PIPEFITTER

## LEVEL 3

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Hydronic Heating 2 (Commercial)	18%
2	Pipe Bending	14%
3	Low Pressure Steam	23%
4	Pipe Template Development	16%
5	Pipe Layout and Fabrication	10%
6.	Gas Piping 1	19%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** June 7, 2010

# TRUCK AND TRANSPORT MECHANIC

## LEVEL 1

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
1	Fundamental Shop Skills	10%
2	Basic Electrical/Electronic Principles	14%
3	Hydraulics 1	15%
4	Lubricants, Lubrication and Cooling	14%
5	Braking Systems	17%
6	Engine Principles	16%
7	Basic Welding	14%
	<b>TOTAL:</b>	<b>100%</b>

**Date:** Nov 29, 2011

# TRUCK AND TRANSPORT MECHANIC

## LEVEL 2

### SECTIONS AND EXAM WEIGHTING

<b>SECTION</b>	<b>TOPIC</b>	<b>PERCENTAGE OF QUESTIONS ON EXAM</b>
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%
	<b>TOTAL:</b>	<b>100%</b>

**Revised:** March 14, 2012