

# Gasfitter – Class A Level 1

## STANDARDIZED LEVEL EXAM (SLE) BREAKDOWN

The following table shows the number of questions per General Area of Competency (GAC) and Competency on the *Gasfitter – Class A Level 1 SLE*.

**Number of questions on each exam: 100**

Level 1 GAC/Competency	#
<b>A. USE COMMON OCCUPATIONAL SKILLS</b>	<b>8</b>
A2. Use drawings and specifications	2
A4. Use technical instruments and testers	3
A5. Use codes, regulations, and standards	2
A6. Organize work and maintain records	1
<b>B. APPLY FUNDAMENTALS OF GAS UTILIZATION</b>	<b>14</b>
B2. Apply combustion theory	6
B3. Apply draft theory	3
B4. Interpret heating, cooling and process systems	2
B5. Apply knowledge of mechanical safety devices	1
B6. Apply alternate-fuel theory	2
<b>C. APPLY ELECTRICAL CONCEPTS</b>	<b>30</b>
C1. Use the principles of electricity and electronics	4
C2. Use electrical wiring diagrams and schematics	4
C3. Use the Canadian Electrical Code (CEC)	2
C5. Apply three phase motor theory	4
C6. Apply Variable Frequency Drive (VFD) and Electronically Commutated Motors (ECM) technology	4
C7. Apply wiring practices	4
C8. Troubleshoot electrical circuits	4

Level 1 GAC/Competency	#
C9. Apply communication and networking technology	4
<b>D. PLAN GAS-FIRED APPLIANCE SYSTEM INSTALLATIONS</b>	<b>27</b>
D1. Size piping and tubing systems	3
D2. Select regulators, valves, and valve train components	5
D3. Plan propane system installations	1
D4. Size venting systems	2
D5. Size air supply systems	2
D6. Select gas-fired appliances	2
D7. Select burners	3
D8. Select flame safeguards	4
D9. Select combustion, safety and operating controls	3
D10. Select electrical components	2
D12. Plan a project	0
<b>E. INSTALL GAS-FIRED SYSTEMS</b>	<b>16</b>
E2. Install regulators, valves, and valve train components	2
E3. Install LPG, LNG and CNG vaporizing and mixing systems	2
E4. Install venting systems	4
E5. Install air supply systems	2
E6. Install draft control systems	1
E8. Install flame safeguards	2
E9. Install combustion, safety and operating controls	2
E11. Install boilers and ancillary equipment	1
<b>F. COMMISSION GAS-FIRED APPLIANCES AND EQUIPMENT</b>	<b>4</b>
F1. Commission fuel/air delivery systems	2
F4. Perform combustion analysis	2
<b>G. MAINTAIN AND SERVICE GAS-FIRED APPLIANCES AND EQUIPMENT</b>	<b>1</b>
G8. Repair and replace furnace refractory	1
<b>Total:</b>	<b>100</b>