

# Refrigeration & Air Conditioning Mechanic

## Interprovincial Journeyman Examination Information

<b>Apprentice Requirements:</b>	4 years and 7200 hours
<b>Tradesperson Requirements:</b>	6 years and 10800 hours
<b>Practical Examination:</b>	No

The interprovincial (IP) journeyman examination for this trade is developed by a national committee of worker and employer representatives. The content for IP Examinations is drawn from the Red Seal Occupational Standard (RSOS) for that trade and is based on industry's standards and expectations. You can download and print a free copy of the RSOS from the Red Seal website by visiting [www.red-seal.ca](http://www.red-seal.ca).

To write the interprovincial journeyman examination, you must either successfully complete an apprenticeship training program or meet tradesperson eligibility requirements. The pass mark is 70%.

### Red Seal Examination preparation resources:

To assist in the understanding of the development of all Interprovincial Red Seal examinations, Employment and Social Development Canada (ESDC) has developed the following information.

- A short explanation of the role of an occupational standard in the development of a Red Seal examination can be accessed on the Red Seal website at the following link: <http://www.red-seal.ca/resources/wh.1t.3sn.4.1-eng.html>
- The Getting Ready for the Examination document can be accessed through the Red Seal website at the following link: <http://www.red-seal.ca/docms/getready-eng.pdf>
- Red Seal examination sample questions can be accessed on the Red Seal website at the following link: <http://www.red-seal.ca/resources/s.1mpl.2.q.5.2st.3.4ns-eng.html>
- A trade specific skills assessment tool is available on the Red Seal website at the following link: <https://www.red-seal.ca/conf/assets/custom/docms/refridgacmech/self-assessment.pdf>
- Use of cell phones, electronic imaging/recording or communication equipment is **not** permitted. You will be required to leave immediately if any of these items are found on your person.

Please note that examinations and study information change frequently. The most recent information is available on our website at [www.saskapprenticeship.ca](http://www.saskapprenticeship.ca).

## Refrigeration & Air Conditioning Mechanic - Red Seal Examination Breakdown

An Interprovincial Red Seal examination is based on the Red Seal Occupational Standard (RSOS) for the trade. The RSOS describes the skills and knowledge required to perform the duties of the trade. Each standard is divided into Major Work Activities (MWA), which are divided into Tasks, which are divided into Sub-tasks.

The Red Seal examination has a certain number of questions assigned to these sections. The number of questions are provided below. For more information, see the full Red Seal Occupational Standard for this [trade](#).

### Total number of questions on the Interprovincial Red Seal examination - 125 questions\*

Subject	Percent	Number of Questions
<b>MWA A: Performs Common Occupational Skills</b>	10%	
<b>Task A-1:</b> Performs safety related functions		3
<b>Task A-2:</b> Uses tools and equipment		5
<b>Task A-3:</b> Organizes work		3
<b>Task A-4:</b> Uses communication and mentoring techniques		2
<b>MWA B: Performs Routine Trade Activities</b>	15%	
<b>Task B-5:</b> Performs work site preparation		5
<b>Task B-6:</b> Performs trade activities		14
<b>MWA C: Plans Installation</b>	14%	
<b>Task C-7:</b> Plans installation of HVAC/R systems		11
<b>Task C-8:</b> Plans installation of control systems		7
<b>MWA D: Performs Installation</b>	21%	
<b>Task D-9:</b> Installs HVAC/R systems		16
<b>Task D-10:</b> Installs control systems		10
<b>MWA E: Performs Commissioning</b>	17%	
<b>Task E-11:</b> Commissions HVAC/R systems		13
<b>Task E-12:</b> Commissions control systems		8
<b>MWA F: Performs Maintenance and Service</b>	23%	
<b>Task F-13:</b> Maintains HVAC/R systems		8
<b>Task F-14:</b> Services HVAC/R systems		11
<b>Task F-15:</b> Maintains and services control systems		9
<b>Total</b>	100%	125

*\*The number of questions on an interprovincial examination, assigned to assess each major work activity of the RSOS, as derived from the collective input from workers within the trade across Canada.*

### **Suggested trade resources when preparing for the examination.**

To assist you, a list of reference textbooks is provided below. Note that ISBN numbers are subject to change. Please consult with your supplier to access their most current version of the textbook you are acquiring. It is not necessary to use these specific textbooks; you may find others which will be equally beneficial. You are encouraged to seek additional reference materials in all test areas.

- Canada's Ozone Layer Protection Awareness Environment Canada SKU 20274702
- Electricity and Controls for HVAC-R by Herman ISBN 1133278205
- Electricity for Refrigeration Heating and Air Conditioning by Smith ISBN 1337399124
- Fundamental Communication Skills AS/COMM 127 SKU 20011161
- Fundamentals of HVACR Stanfield ISBN 9780132859615
- Heating and Cooling Essentials by Killinger ISBN 1631260596
- Industrial Mathematics MATH 199 SKU 20030506
- Industrial Mathematics RAC RAC/MATH 285 SKU 20009847
- Industrial Mathematics RAC RAC/MATH 382 SKU 20009823
- Oxyfuel Welding and Oxyfuel Cutting WELD / OFW and OFC SKU 20170196

### **Saskatchewan Polytechnic Modules Supplied by Program:**

- Refrigeration Mechanic Apprentice Level 1 Harmonized
- Refrigeration Mechanic Apprentice Level 2 Harmonized
- Refrigeration Mechanic Apprentice Level 3 Harmonized
- Refrigeration Mechanic Apprentice Level 4 Harmonized

Individual Learning Modules (ILMs) for the Refrigeration trade may be ordered through the Saskatchewan Polytechnic Bookstore Call Centre: 1-866-569-8398 or through <https://ilm.nait.ca/home> under Refrigeration and Air Conditioning Mechanic.

\*Unless otherwise noted, books listed here are available through the Saskatchewan Polytechnic Bookstore Call Centre: 1-866-569-8398

NOTE: Textbooks **are not** usually available from libraries. When textbooks are being purchased, candidates should allow several weeks for delivery and several weeks for studying.

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This information is subject to change without notice.