



# **RED SEAL EXAM**

# **SELF-ASSESSMENT GUIDE**

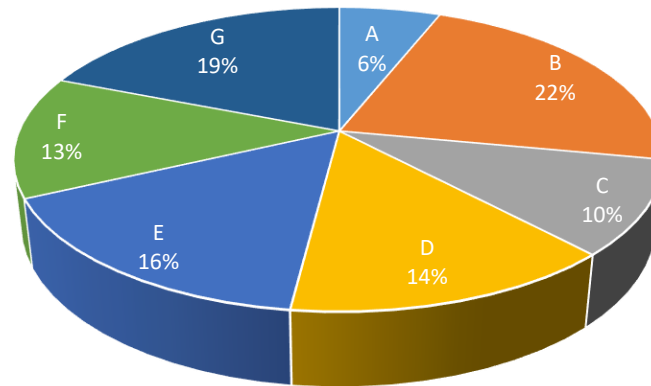
## **MOBILE CRANE OPERATOR**



# Red Seal Exam Weighting

This pie chart represents the distribution of questions on the Red Seal Exam. The self-assessment on the next pages shows the Tasks and Sub-tasks within each Block and the number of questions assigned to each Block and Task.

The Red Seal Exam for this trade has 110 questions.



	<b>Block / Exam Section</b>	<b>Percentage of Questions</b>	<b>Number of Questions out of 110</b>
A	Common Occupational Skills	6%	7
B	Hoisting Calculations	22%	24
C	Crane Inspection and Maintenance	10%	11
D	Rigging	14%	15
E	Lift Planning, Site Preparation and Crane Setup	16%	18
F	Crane Assembly, Disassembly and Transport	13%	14
G	Crane Operations	19%	21

# Breakdown of Red Seal Exam Questions and Self-Assessment

Rate your own understanding and experience with each task. Look at the activities that make up each task and consider your experience with them of them when rating yourself. Be honest!

**● LOW** I have **no or very little understanding or experience** in this activity

**● MEDIUM** I **understand** this activity and have **some experience** doing it in **limited** situations

**● HIGH** I have a **very good understanding** of this activity and am **fully competent** in doing it in **many** situations

This is not intended to accurately predict how you will actually do on the exam – there may be areas where you are over-confident or under-confident. But it should give you an idea of your strengths and weaknesses.

After you rate your own knowledge and experience as **LOW**, **MEDIUM** or **HIGH**, check how many questions there are and write down how many you think you will get correct.




**LOW**, you may not get many of those questions right.




**MEDIUM**, you might get some right.




**HIGH**, you expect to be able to get most of those questions right.




Comparing your scores with the number of questions on the exam will help you identify which areas you need to prepare the most. Add up your scores from each section to get an idea of your overall readiness for the exam.

	● <b>LOW</b> Understanding / Experience	● <b>MEDIUM</b> Understanding / Experience	● <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>A – Common Occupational Skills</b>					
1. Performs safety related functions. 1.01 Maintains a safe work environment. 1.02 Uses personal protective equipment (PPE) and safety equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>
2. Organizes work. 2.01 Communicates with others. 2.02 Uses documentation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
Total number of questions for this section:				7	SUM OF YOUR EXPECTED CORRECT ANSWERS <input type="text"/>




	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>B - Hoisting Calculations</b>					
3. Determines load weights. 3.01 Identifies the weight. 3.02 Calculates weight.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	<input type="text"/>
4. Calculates crane capacity. 4.01 Determines radius and crane configuration. 4.02 Interprets load charts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	<input type="text"/>
5. Performs rigging calculations. 5.01 Performs sling angle calculations. 5.02 Performs working load limit (WLL) calculations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	<input type="text" value="v"/>
Total number of questions for this section:				<b>24</b>	SUM OF YOUR EXPECTED CORRECT ANSWERS <input type="text"/>




	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>C - Crane Inspection and Maintenance</b>					
6. Performs pre-operational checks and regular inspections. 6.01 Inspects engine systems. 6.02 Inspects air systems. 6.03 Inspects electrical systems. 6.04 Inspects hydraulic systems. 6.05 Inspects chassis/car body and running gear components. 6.06 Inspects outriggers and counterweights. 6.07 Inspects boom components and attachments. 6.08 Inspects hoisting systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="text"/>
7. Performs operational and continual checks. 7.01 Checks operating controls. 7.02 Inspects monitoring and warning systems. 7.03 Monitors running lines, hoist lines and standing ropes. 7.04 Monitors gauges and warning systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>




	 <b>LOW</b> <b>Understanding</b> <b>/ Experience</b>	 <b>MEDIUM</b> <b>Understanding</b> <b>/ Experience</b>	 <b>HIGH</b> <b>Understanding</b> <b>/ Experience</b>	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
8. Performs minor crane maintenance. 8.01 Changes oil and filters. 8.02 Greases crane. 8.03 Lubricates wire ropes. 8.04 Makes minor adjustments and replacements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Total number of questions for this section:				11	SUM OF YOUR EXPECTED CORRECT ANSWERS




	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>D - Rigging</b>					
9. Inspects, maintains and stores slings and hardware. 9.01 Lubricates slings and hardware. 9.02 Identifies deficiencies in slings and hardware. 9.03 Disposes of damaged slings and hardware. 9.04 Stores slings and hardware.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	<input type="text"/>
10. Follows rigging procedures. 10.01 Selects required rigging. 10.02 Rigs load. 10.03 Monitors rigging.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	<input type="text"/>
Total number of questions for this section:				<b>15</b>	SUM OF YOUR EXPECTED CORRECT ANSWERS <input type="text"/>









	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>E - Lift Planning, Site Preparation and Crane Setup</b>					
11. Performs pre-lift planning. 11.01 Participates in routine, engineered and specialty lift planning. 11.02 Evaluates risks and hazards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	<input type="text"/>
12. Sets up crane. 12.01 Performs final site inspection. 12.02 Positions crane. 12.03 Completes setup.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	<input type="text"/>
Total number of questions for this section:				<b>18</b>	<input type="text"/> SUM OF YOUR EXPECTED CORRECT ANSWERS




	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>F - Crane Assembly, Disassembly and Transport</b>					
13. Loads and unloads components for transport. 13.01 Loads crane and components. 13.02 Unloads crane and components.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
14. Drives cranes on public roadways. 14.01 Performs pre-trip planning. 14.02 Prepares crane for transport. 14.03 Drives cranes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	




	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<p>15. Assembles and disassembles lattice boom cranes.</p> <p>15.01 Installs tracks on car body (lattice boom).</p> <p>15.02 Installs house (lattice boom).</p> <p>15.03 Installs outrigger boxes (lattice boom).</p> <p>15.04 Installs boom base (lattice boom).</p> <p>15.05 Assembles boom and jib (lattice boom).</p> <p>15.06 Installs counterweights (lattice boom).</p> <p>15.07 Installs hoist lines, hook blocks and overhaul ball (lattice boom).</p> <p>15.08 Removes hoist lines, hook blocks and overhaul ball (lattice boom).</p> <p>15.09 Disassem-bles boom and jib (lattice boom).</p> <p>15.10 Removes counterweights (lattice boom).</p> <p>15.11 Removes boom base (lattice boom).</p> <p>15.12 Removes house (lattice boom).</p> <p>15.13 Removes tracks from car body (lattice boom).</p> <p>15.14 Removes outrigger boxes (lattice boom).</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	

	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<p>16. Assembles and disassembles telescopic boom cranes.</p> <p>16.01 Installs outrigger boxes (telescopic boom).</p> <p>16.02 Installs main boom (telescopic boom).</p> <p>16.03 Installs hoist lines, hook blocks and overhaul ball (telescopic boom).</p> <p>16.04 Installs counterweights (telescopic boom).</p> <p>16.05 Installs swing-away jibs and inserts (telescopic boom).</p> <p>16.06 Removes swing-away jibs and inserts (telescopic boom).</p> <p>16.07 Removes counterweights (telescopic boom).</p> <p>16.08 Removes hoist lines, hook blocks and overhaul ball (telescopic boom).</p> <p>16.09 Removes main boom (telescopic boom).</p> <p>16.10 Removes outrigger boxes (telescopic boom).</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	

	 <b>LOW</b> <b>Understanding</b> <b>/ Experience</b>	 <b>MEDIUM</b> <b>Understanding</b> <b>/ Experience</b>	 <b>HIGH</b> <b>Understanding</b> <b>/ Experience</b>	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
17. Assembles and disassembles specialty equipment and attachments. 17.01 Assembles specialty equipment and attachments. 17.02 Disassembles specialty equipment and attachments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Total number of questions for this section:				<b>14</b>	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%;"></div>

	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
<b>G - Crane Operations</b>					
18. Performs common craning operations. 18.01 Configures load moment indicator (LMI). 18.02 Mobilizes crane on jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>
19. Operates friction drive lattice boom cranes. 19.01 Operates friction drive crawler-mounted lattice boom cranes. 19.02 Operates friction drive truck-mounted lattice boom cranes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
20. Operates hydraulic drive lattice boom cranes. 20.01 Operates hydraulic drive crawler- mounted lattice boom cranes. 20.02 Operates hydraulic drive truck-mounted lattice boom cranes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>

	 <b>LOW</b> <b>Understanding</b> <b>/ Experience</b>	 <b>MEDIUM</b> <b>Understanding</b> <b>/ Experience</b>	 <b>HIGH</b> <b>Understanding</b> <b>/ Experience</b>	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
21. Operates telescopic boom cranes. 21.01 Operates crawler-mounted telescopic cranes. 21.02 Operates rubber-mounted telescopic cranes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>
22. Performs specialty craning operations. 22.01 Operates piledriver. 22.02 Performs duty cycle operations. 22.03 Operates cranes on barges. 22.04 Performs multi-crane lifts. 22.05 Uses personnel hoisting equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>

	 <b>LOW</b> Understanding / Experience	 <b>MEDIUM</b> Understanding / Experience	 <b>HIGH</b> Understanding / Experience	Number of questions on the Red Seal exam	Based on your self-rating, how many of the questions do you think you will get correct?
23. Secures crane. 23.01 Secures crane for short term. 23.02 Secures crane for long term.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>
Total number of questions for this section:				<b>21</b>	SUM OF YOUR EXPECTED CORRECT ANSWERS <input type="text"/>
Now, add up the totals you gave yourself for each section.				TOTAL NUMBER OF QUESTIONS 110	MY EXPECTED TOTAL <input type="text"/>



## Interpreting your Self-Assessment

What score did you give yourself?

Divide it by the number of questions to get a percentage.

The passing mark for the Red Seal exam is 70%. If you rated yourself higher than that overall, you feel pretty confident that your experience and knowledge in the trade are good enough for a pass. However, remember that this self-assessment is just a guide. We still encourage you to develop a study plan and to consider the areas where you rated yourself as less confident.

If your overall score is less than 70%, you might have more work to do. Look more closely at your scores section by section. What are the areas where you have the most to gain?

Look over the Red Seal Exam Preparation Guide for more advice.