

# RED SEAL EXAM SELF-ASSESSMENT GUIDE

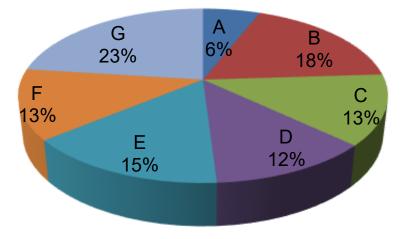
# **Mobile Crane Operator**



## **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 Major Work Activity and the number of questions assigned to each Major Work Activity and Task.

The Red Seal Exam for this trade has 110 questions.



	Major Work Activity / Exam Section	Percentage of Questions	Number of Questions out of 110
А	Performs common occupational skills	6%	7
В	Performs hoisting calculations	18%	20
С	Inspects and maintains crane	13%	14
D	Performs rigging	12%	13
Е	Plans lift, prepares site and sets up crane	15%	16
F	Assembles, disassembles and transports crane	13%	15
G	Operates crane	23%	25

### **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					
	I understand this activity and have some experience doing it in limited situations				
HIGH	I have a <b>very good understanding</b> of this activity and am <b>fully competent</b> in doing it in <b>many</b> 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	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
A – Performs common occupational skills					
Task A-1 Performs safety-related functions A-1.01 Maintains a safe work environment A-1.02 Uses personal protective equipment (PPE) and safety equipment A-1.03 Uses documentation				4	
Task A-2 Uses communication and mentoring techniques A-2.01 Uses communication techniques A-2.02 Uses mentoring techniques				3	
					SUM OF YOUR EXPECTED CORRECT ANSWERS
Total number of questions for this section:				7	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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 – Performs hoisting calculations					
Task B-3 Determines load weights B-3.01 Identifies weight B-3.02 Calculates weight				6	
Task B-4 Calculates crane capacity B-4.01 Determines radius and crane configuration B-4.02 Interprets load charts				8	
Task B-5 Performs rigging calculations B-5.01 Performs sling angle calculations B-5.02 Performs working load limit (WLL) calculations				6	
					SUM OF YOUR EXPECTED CORRECT ANSWERS
Total number of questions for this section:				20	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
C – Inspects and maintains crane					
<ul> <li>Task C-6 Performs pre-operational checks and regular inspections</li> <li>C-6.01 Inspects engine systems</li> <li>C-6.02 Inspects air systems</li> <li>C-6.03 Inspects electrical systems</li> <li>C-6.04 Inspects hydraulic systems</li> <li>C-6.05 Inspects chassis/car body and running gear components</li> <li>C-6.06 Inspects outriggers and counterweights</li> <li>C-6.07 Inspects boom components and attachments</li> <li>C-6.08 Inspects hoisting systems</li> </ul>				6	
Task C-7 Performs operational and continual checks C-7.01 Checks operating controls C-7.02 Inspects monitoring and warning systems C-7.03 Monitors running lines, hoist ropes and standing ropes C-7.04 Monitors gauges and warning systems C-7.05 Monitors support base				5	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
Task C-8 Performs minor crane maintenance C-8.01 Changes oil and filter C-8.02 Greases crane C-8.03 Lubricates wire ropes C-8.04 Makes adjustments and replacements				3	
					SUM OF YOUR EXPECTED CORRECT ANSWERS
Total number of questions for this section:				14	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
D – Performs rigging					
Task D-9 Inspects, maintains and stores slings and hardware D-9.01 Lubricates slings and hardware D-9.02 Identifies deficiencies in slings and hardware D-9.03 Disposes of damaged slings and hardware D-9.04 Stores slings and hardware				6	
Task D-10 Follows rigging procedures D-10.01 Selects required rigging D-10.02 Rigs loads D-10.03 Monitors rigging				7	
Total number of questions for this section:				13	SUM OF YOUR EXPECTED CORRECT ANSWERS

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
E – Diagnoses and repairs electrical and comfort control systems					
Task E-11 Performs pre-lift planning E-11.01 Participates in routine, engineered and specialty lift planning E-11.02 Evaluates risks and hazards				9	
Task E-12 Sets up crane E-12.01 Performs final site inspection E-12.02 Positions crane E-12.03 Completes setup				7	
Total number of questions for this section:				16	SUM OF YOUR EXPECTED CORRECT ANSWERS

	LOW Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
F – Assembles, disassembles and transports crane					
Task F-13 Loads and unloads components for transport F-13.01 Loads crane and components F-13.02 Unloads crane and components				3	
Task F-14 Drives cranes on public roadways F-14.01 Performs pre-trip planning F-14.02 Prepares crane for transport F-14.03 Drives cranes				2	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
<ul> <li>Task F-15 Assembles and disassembles lattice boom cranes</li> <li>F-15.01 Installs tracks on car body (lattice boom)</li> <li>F-15.02 Installs superstructure/upperworks (lattice boom)</li> <li>F-15.03 Installs outrigger boxes (lattice boom)</li> <li>F-15.04 Installs boom base (lattice boom)</li> <li>F-15.05 Installs counterweights (lattice boom)</li> <li>F-15.06 Assembles main boom, tip and boom attachments (lattice boom)</li> <li>F-15.07 Installs hook blocks and overhaul ball (lattice boom)</li> <li>F-15.08 Removes hook blocks and overhaul ball (lattice boom)</li> <li>F-15.09 Disassembles main boom, tip and boom attachments (lattice boom)</li> <li>F-15.10 Removes counterweights (lattice boom)</li> <li>F-15.11 Removes superstructure/upperworks (lattice boom)</li> <li>F-15.12 Removes tracks from car body (lattice boom)</li> <li>F-15.13 Removes outrigger boxes (lattice boom)</li> </ul>				4	

	LOW Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
<ul> <li>Task F-16 Assembles and disassembles telescopic boom cranes</li> <li>F-16.01 Installs tracks on car body (telescopic boom)</li> <li>F-16.02 Installs outrigger boxes (telescopic boom)</li> <li>F-16.03 Installs superstructure/upperworks (telescopic boom)</li> <li>F-16.04 Installs main boom (telescopic boom)</li> <li>F-16.05 Installs hook blocks and overhaul ball (telescopic boom)</li> <li>F-16.06 Installs counterweights (telescopic boom)</li> <li>F-16.07 Installs jibs and inserts (telescopic boom)</li> <li>F-16.08 Removes jibs and inserts (telescopic boom)</li> <li>F-16.09 Removes counterweights (telescopic boom)</li> <li>F-16.10 Removes hook blocks and overhaul ball (telescopic boom)</li> <li>F-16.11 Removes main boom (telescopic boom)</li> <li>F-16.12 Removes outrigger boxes (telescopic boom)</li> <li>F-16.13 Removes tracks from car body (telescopic boom)</li> <li>F-16.14 Removes superstructure/upperworks (telescopic boom)</li> </ul>				4	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
Task F-17 Assembles and disassembles specialty equipment and attachments F-17.01 Assembles specialty equipment and attachments F-17.02 Disassembles specialty equipment and attachments				2	
Total number of questions for this postion:				45	SUM OF YOUR EXPECTED CORRECT ANSWERS
Total number of questions for this section:				15	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
G – Operates crane					
Task G-18 Performs common craning operations G-18.01 Configures load moment indicator (LMI) G-18.02 Mobilizes crane on jobsite				5	
Task G-19 Operates friction drive lattice boom cranes G-19.01 Operates friction drive crawler-mounted lattice boom cranes G-19.02 Operates friction drive truck-mounted lattice boom cranes				2	
Task G-20 Operates hydraulic drive lattice boom cranes G-20.01 Operates hydraulic drive crawler- mounted lattice boom cranes G-20.02 Operates hydraulic drive truck-mounted lattice boom cranes				6	
Task G-21 Operates telescopic boom cranes G-21.01 Operates crawler-mounted telescopic cranes G-21.02 Operates rubber tire-mounted telescopic cranes				5	

	<b>LOW</b> Understanding / Experience	MEDIUM Understanding / Experience	<ul> <li>HIGH</li> <li>Understanding</li> <li>/ Experience</li> </ul>	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?
Task G-22 Performs specialty craning operations G-22.01 Operates crane with piledriving equipment G-22.02 Performs duty cycle operations G-22.03 Operates cranes on floating platforms G-22.04 Performs multi-crane lifts G-22.05 Uses personnel hoisting equipment				4	
Task G-23 Secures crane G-23.01 Secures crane for short term G-23.02 Secures crane for long term				3	
					SUM OF YOUR EXPECTED CORRECT ANSWERS
Total number of questions for this section:				21	
				TOTAL NUMBER OF QUESTIONS	MY EXPECTED TOTAL
Now, add up the totals you gave yourself for each section.				110	

### **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.