



RED SEAL EXAM

SELF-ASSESSMENT GUIDE

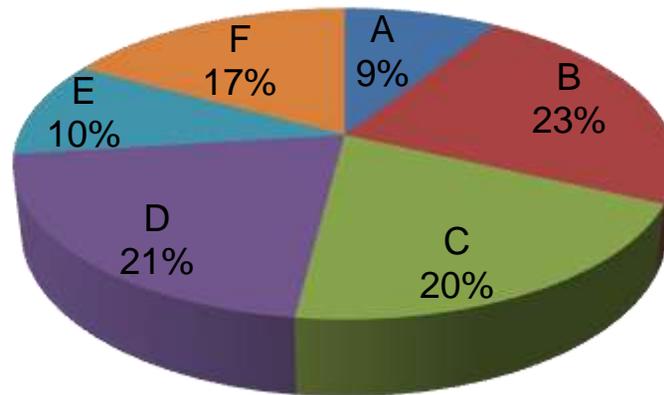
INDUSTRIAL ELECTRICIAN



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 100 questions.



	Major Work Activity / Exam Section	Number of Questions out of 100
A	Performs common occupational skills	9
B	Installs and maintains generating, distribution and service systems	23
C	Installs and maintains wiring systems	20
D	Installs and maintains rotating and non-rotating equipment and control systems	21
E	Installs and maintains signalling and communication systems	10
F	Installs and maintains process control systems	17

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.

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
A – Performs common occupational skills					
1. Performs safety-related functions 1.01 Maintains safe work environment 1.02 Uses personal protective equipment (PPE) and safety equipment 1.03 Performs lock-out and tag-out procedures 1.04 Identifies environmental conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>
2. Uses tools and equipment 2.01 Uses common and specialty tools and equipment 2.02 Uses access equipment 2.03 Uses rigging, hoisting and lifting equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
3. Organizes work 3.01 Interprets plans, drawings and specifications 3.02 Identifies hazardous locations 3.03 Organizes materials and supplies 3.04 Plans project tasks and procedures 3.05 Prepares worksite 3.06 Finalizes required documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
4. Fabricates and installs support components 4.01 Fabricates support structures 4.02 Installs brackets, hangers and fasteners 4.03 Installs seismic restraint systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
5. Commissions and decommissions electrical systems 5.01 Commissions systems 5.02 Performs shutdown and startup procedures 5.03 Decommissions systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
6. Uses communication and mentoring techniques 6.01 Uses communication techniques 6.02 Uses mentoring techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
Total number of questions for this section:				9	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%;"></div>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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 – Installs and maintains generating, distribution and service systems					
7. Installs and maintains consumer/supply services and metering equipment 7.01 Installs single-phase consumer/supply services and metering equipment 7.02 Maintains single-phase consumer/supply services and metering equipment 7.03 Installs three-phase consumer/supply services and metering equipment 7.04 Maintains three-phase consumer/supply services and metering equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
8. Installs and maintains protection devices 8.01 Installs overcurrent protection devices 8.02 Maintains overcurrent protection devices 8.03 Installs ground fault, arc fault and surge protection devices 8.04 Maintains ground fault, arc fault and surge protection devices 8.05 Installs under and over voltage protection devices 8.06 Maintains under and over voltage protection devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
9. Installs and maintains low voltage distribution systems 9.01 Installs low voltage distribution equipment 9.02 Maintains low voltage distribution equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
10. Installs and maintains power conditioning systems 10.01 Installs power conditioning systems 10.02 Maintains power conditioning systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
11. Installs and maintains bonding, grounding and ground fault detection systems 11.01 Installs grounding systems 11.02 Maintains grounding systems 11.03 Installs bonding systems 11.04 Maintains bonding systems 11.05 Installs ground fault detection systems 11.06 Maintains ground fault detection systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
12. Installs and maintains power generating systems 12.01 Installs alternating current (AC) generating systems 12.02 Maintains AC generating systems 12.03 Installs direct current (DC) generating systems 12.04 Maintains DC generating systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
13. Installs and maintains renewable energy generating and storage systems 13.01 Installs renewable energy generating and storage systems 13.02 Maintains renewable energy generating and storage systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
14. Installs and maintains high voltage systems 14.01 Installs high voltage systems 14.02 Maintains high voltage systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
15. Installs and maintains transformers 15.01 Installs extra-low voltage transformers 15.02 Maintains extra-low voltage transformers 15.03 Installs low voltage single-phase transformers 15.04 Maintains low voltage single-phase transformers 15.05 Installs low voltage three-phase transformers 15.06 Maintains low voltage three-phase transformers 15.07 Installs high voltage transformers 15.08 Maintains high voltage transformers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Total number of questions for this section:				23	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%;"></div>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
C – Installs and maintains wiring systems					
16. Installs and maintains raceways, cables, conductors and enclosures 16.01 Installs conductors and cables 16.02 Maintains conductors and cables 16.03 Installs conduit, tubing and fittings 16.04 Installs raceways 16.05 Installs boxes and enclosures 16.06 Maintains conduit, tubing, fittings, raceways, boxes and enclosures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
17. Installs and maintains branch circuitry and devices 17.01 Installs luminaires 17.02 Maintains luminaires 17.03 Installs wiring devices 17.04 Maintains wiring devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
18. Installs and maintains heating, ventilation and air-conditioning (HVAC) electrical components 18.01 Connects power to HVAC systems and associated equipment 18.02 Installs HVAC controls 18.03 Maintains HVAC electrical components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
19. Installs and maintains electric heating systems and controls 19.01 Installs electric heating systems and controls 19.02 Maintains electric heating systems and controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
20. Installs and maintains exit and emergency lighting systems 20.01 Installs exit and emergency lighting systems 20.02 Maintains exit and emergency lighting systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
21. Installs and maintains cathodic protection systems 21.01 Installs cathodic protection systems 21.02 Maintains cathodic protection systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Total number of questions for this section:				20	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%; margin-top: 5px;"></div>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
D – Installs and maintains rotating and non rotating equipment and control systems					
22. Installs and maintains motor starters and control devices 22.01 Installs motor starters 22.02 Maintains motor starters 22.03 Installs motor control devices 22.04 Maintains motor control devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	
23. Installs and maintains drives 23.01 Installs AC drives 23.02 Maintains AC drives 23.03 Installs DC drives 23.04 Maintains DC drives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
24. Installs and maintains non-rotating equipment and associated controls 24.01 Installs non-rotating equipment and associated controls 24.02 Maintains non-rotating equipment and associated controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
25. Installs and maintains motors 25.01 Installs single-phase motors 25.02 Maintains single-phase motors 25.03 Installs three-phase motors 25.04 Maintains three-phase motors 25.05 Installs DC motors 25.06 Maintains DC motors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	
Total number of questions for this section:				21	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%;"></div>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
E – Installs and maintains signalling and communication systems					
26. Installs and maintains signalling systems 26.01 Installs fire alarm systems 26.02 Maintains fire alarm systems 26.03 Installs security and surveillance systems 26.04 Maintains security and surveillance systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	
27. Installs and maintains communication systems 27.01 Installs communication systems 27.02 Maintains communication systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
28. Installs and maintains building automation systems 28.01 Installs building automation systems 28.02 Maintains building automation systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Total number of questions for this section:				10	SUM OF YOUR EXPECTED CORRECT ANSWERS <div style="background-color: #cccccc; height: 20px; width: 100%;"></div>

	 LOW Understanding / Experience	 MEDIUM Understanding / Experience	 HIGH 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?
F – Installs and maintains process control systems					
29. Installs and maintains input/output (I/O) devices 29.01 Installs discrete input/output (I/O) devices 29.02 Maintains discrete input/output (I/O) devices 29.03 Installs analog input/output (I/O) devices 29.04 Maintains analog input/output (I/O) devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	
30. Installs, programs and maintains automated control systems 30.01 Installs automated control systems 30.02 Maintains automated control systems 30.03 Programs automated control systems 30.04 Optimizes system performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	

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.