



RED SEAL EXAM

SELF-ASSESSMENT GUIDE

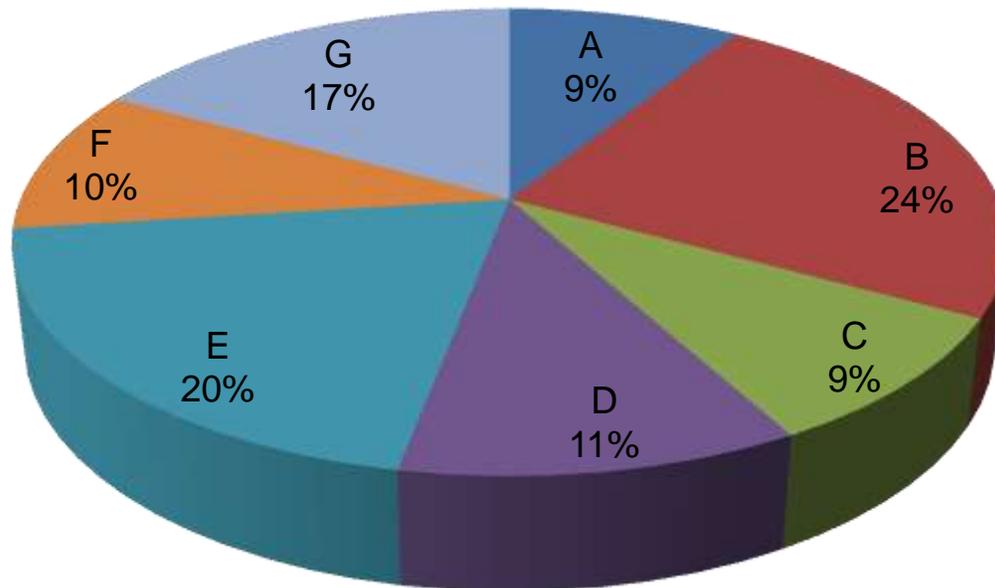
Instrumentation and Control Technician



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 125 questions.



	Major Work Activity / Exam Section	Percentage of Questions	Number of Questions out of 125
A	Performs common occupational skills	9%	12
B	Installs and services process measuring and indicating devices	24%	30
C	Installs and services safety and security systems and devices	9%	11
D	Installs and services hydraulic, pneumatic and electrical systems	11%	14
E	Installs, configures and services final control elements	20%	25
F	Installs and services communication systems and devices	10%	12
G	Installs and services control systems and process control	17%	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.

	● 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					
Task A-1 Performs safety-related functions A-1.01 Maintains safe work environment A-1.02 Uses personal protective equipment (PPE) and safety equipment A-1.03 Performs de-energizing, lock-out and tag- out procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
Task A-2 Uses tools and equipment A-2.01 Uses calibration, configuration and test equipment A-2.02 Uses hand and power tools A-2.03 Uses access equipment A-2.04 Uses rigging, hoisting and lifting equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<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?
Task A-3 Organizes work A-3.01 Uses documentation A-3.02 Interprets drawings and schematics A-3.03 Plans tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>
Task A-4 Uses communication and mentoring techniques A-4.01 Uses communication techniques A-4.02 Uses mentoring techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>
Total number of questions for this section:				12	SUM OF YOUR EXPECTED CORRECT ANSWERS <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?
B – Installs and services process measuring and indicating devices					
Task B-5 Installs and services pressure, temperature, level and flow devices B-5.01 Installs pressure, temperature, level and flow devices B-5.02 Maintains pressure, temperature, level and flow devices B-5.03 Diagnoses pressure, temperature, level and flow devices B-5.04 Repairs pressure, temperature, level and flow devices	□	□	□	9	
Task B-6 Installs and services signal transducers B-6.01 Performs installation and configuration of signal transducers B-6.02 Diagnoses signal transducers B-6.03 Performs maintenance and repairs on signal transducers	□	□	□	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?
Task B-7 Installs and services motion, speed, position and vibration devices B-7.01 Installs motion, speed, position and vibration devices B-7.02 Maintains motion, speed, position and vibration devices B-7.03 Diagnoses motion, speed, position and vibration devices B-7.04 Repairs motion, speed, position and vibration devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>
Task B-8 Installs and services mass, density and consistency devices B-8.01 Installs mass, density and consistency devices B-8.02 Maintains mass, density and consistency devices B-8.03 Diagnoses mass, density and consistency devices B-8.04 Repairs mass, density and consistency devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>
Task B-9 Installs and services process analyzers B-9.01 Installs process analyzers B-9.02 Maintains process analyzers B-9.03 Diagnoses process analyzers B-9.04 Repairs process analyzers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<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?
Task B-10 Installs and services multiple variable computing devices B-10.01 Installs multiple variable computing devices B-10.02 Maintains multiple variable computing devices B-10.03 Diagnoses multiple variable computing devices B-10.04 Repairs multiple variable computing devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	
Total number of questions for this section:				30	SUM OF YOUR EXPECTED CORRECT ANSWERS

	● 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 services safety and security systems and devices					
Task C-11 Installs and services safety systems and devices C-11.01 Installs safety systems and devices C-11.02 Maintains safety systems and devices C-11.03 Diagnoses safety systems and devices C-11.04 Repairs safety systems and devices	□	□	□	6	
Task C-12 Installs and services facility security systems (NOT COMMON CORE) C-12.01 Installs facility security systems (NOT COMMON CORE) C-12.02 Maintains facility security systems (NOT COMMON CORE) C-12.03 Diagnoses facility security systems (NOT COMMON CORE) C-12.04 Repairs facility security systems (NOT COMMON CORE)	□	□	□	0	

	● 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?
Task C-13 Installs and services safety instrumented systems (SIS) C-13.01 Installs SIS C-13.02 Configures SIS C-13.03 Maintains SIS C-13.04 Diagnoses SIS C-13.05 Repairs SIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
Total number of questions for this section:				11	SUM OF YOUR EXPECTED CORRECT ANSWERS

	● 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 services hydraulic, pneumatic and electrical systems					
Task D-14 Installs and services control devices for hydraulic systems D-14.01 Installs control devices for hydraulic systems D-14.02 Diagnoses control devices for hydraulic systems D-14.03 Performs maintenance and repairs on control devices for hydraulic systems	□	□	□	3	
Task D-15 Installs and services pneumatic equipment D-15.01 Installs pneumatic equipment D-15.02 Diagnoses pneumatic equipment D-15.03 Performs maintenance and repairs on pneumatic equipment	□	□	□	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?
Task D-16 Installs and services electrical and electronic equipment D-16.01 Installs electrical and electronic equipment D-16.02 Diagnoses electrical and electronic equipment D-16.03 Performs maintenance and repairs for electrical and electronic equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	
Total number of questions for this section:				14	SUM OF YOUR EXPECTED CORRECT ANSWERS

	● 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, configures and services final control elements					
Task E-17 Installs and services valves E-17.01 Installs valves E-17.02 Maintains valves E-17.03 Diagnoses valves E-17.04 Repairs valves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	<input type="text"/>
Task E-18 Installs and services actuators E-18.01 Installs actuators E-18.02 Maintains actuators E-18.03 Diagnoses actuators E-18.04 Repairs actuators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input type="text"/>
Task E-19 Installs and services positioners E-19.01 Installs positioners E-19.02 Maintains positioners E-19.03 Diagnoses positioners E-19.04 Repairs positioners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	<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?
Task E-20 Configures and services variable speed drives (VSD) E-20.01 Configures VSD E-20.02 Maintains VSD E-20.03 Diagnoses VSD E-20.04 Repairs VSD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	
Total number of questions for this section:				25	SUM OF YOUR EXPECTED CORRECT ANSWERS

	● 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 services communication systems and devices					
Task F-21 Installs and services control network systems F-21.01 Performs installation and configuration on control network systems F-21.02 Diagnoses control network systems F-21.03 Performs maintenance and repairs on control network systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
Task F-22 Installs and services signal converters F-22.01 Performs installation and configuration of signal converters F-22.02 Diagnoses signal converters F-22.03 Performs maintenance and repairs on signal converters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	
Task F-23 Installs and services gateways, bridges and media converters F-23.01 Performs installation and configuration of gateways, bridges and media converters F-23.02 Diagnoses gateways, bridges and media converters F-23.03 Performs maintenance and repairs on gateways, bridges and media converters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Total number of questions for this section:				12	SUM OF YOUR EXPECTED CORRECT ANSWERS

	 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?
G – Installs and services control systems and process control					
Task G-24 Establishes and optimizes process control strategies G-24.01 Determines process control strategy G-24.02 Optimizes process control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="text"/>
Task G-25 Installs and services stand-alone controllers (SAC) G-25.01 Installs SAC G-25.02 Configures SAC G-25.03 Performs maintenance, diagnostics and repairs on SAC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>
Task G-26 Installs and services programmable logic controllers (PLC) G-26.01 Installs PLC G-26.02 Configures PLC G-26.03 Performs maintenance, diagnostics and repairs on PLC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="text"/>
Task G-27 Installs and services distributed control systems (DCS) G-27.01 Installs DCS G-27.02 Configures DCS G-27.03 Performs maintenance, diagnostics and repairs on DCS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<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?
Task G-28 Installs and services human machine interface (HMI) G-28.01 Installs HMI G-28.02 Configures HMI G-28.03 Performs maintenance, diagnostics and repairs on HMI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Task G-29 Installs and services supervisory control and data acquisition (SCADA) systems G-29.01 Installs SCADA systems G-29.02 Configures SCADA systems G-29.03 Performs maintenance, diagnostics and repairs on SCADA systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Total number of questions for this section:				21	SUM OF YOUR EXPECTED CORRECT ANSWERS
Now, add up the totals you gave yourself for each section.				TOTAL NUMBER OF QUESTIONS 125	MY EXPECTED TOTAL

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.