

TEN FREE 442A INDUSTRIAL ELECTRICIAN PRACTICE QUESTIONS.

QUESTIONS	COST	LAST CHECKED
10, multiple choice, answers explained	Free. No account, no email	October 3, 2026

Ten 442A Industrial Electrician questions in the format of the Red Seal exam: four options, one correct answer, no trick questions. They are free to use, print and share. There is nothing to sign up for on this page.

01 How to use these

The questions come from the TicketPrep 442A bank and are spread across the exam's work activities in the order and roughly the proportion the Red Seal Program publishes for this trade: A (performs common occupational skills), B (installs and maintains generating, distribution and service systems), C (installs and maintains wiring systems), D (installs and maintains rotating and non-rotating equipment and control systems), E (installs and maintains signalling and communication systems), F (installs and maintains process control systems). Answer each one before opening the explanation. Every explanation covers all four options, because on the real exam the wrong options are written to be plausible, and knowing *why* they are wrong is most of the skill.

- **Pace.** The exam allows four hours for 100 questions, so about 2 min 24 s per question. Try these at that pace.
- **Print.** The printed version shows the questions and the answer key without the explanations, so it works as a handout.
- **Mark.** The pass mark is 70 percent on every Red Seal trade; seven of ten here is the same bar.

The questions

Q1 · PROCEDURAL · PERFORMS COMMON OCCUPATIONAL SKILLS

In a flour mill's electrical room, a layer of flour dust has built up on the cable trays and on top of the MCC sections. How should the dust be removed?

- A. With a vacuum approved for combustible dust, bonded and grounded.
- B. By washing it down with a low-pressure hose, after locking out the MCC.
- C. By blowing it off the trays with compressed air at a reduced pressure.
- D. With an ordinary shop vacuum, fitted with a fine HEPA filter.

Q2 · PROCEDURAL · INSTALLS AND MAINTAINS GENERATING, DISTRIBUTION AND SERVICE SYSTEMS

A water treatment plant's new single-phase service runs underground in rigid PVC conduit from the supply authority's padmount transformer and enters the electrical room below grade. What does the CEC require at the conduit end inside the building?

- A. Fit an expansion joint where the conduit rises from grade.
- B. Fit a bonding bushing with a jumper to the service box.
- C. Seal it with a compound that keeps out moisture and gas.
- D. Slope it toward the building so it drains into the box.

A 120 kVA online UPS in a generating station's control building must be fully isolated for service while its critical load stays powered. In what order is it put on maintenance bypass?

- A. Open the UPS output, close the maintenance bypass, then go to static bypass.
- B. Open the UPS input, let the battery carry the load, then close the bypass.
- C. Close the maintenance bypass, go to static bypass, then open the UPS input.
- D. Static bypass, close maintenance bypass, then open UPS output and input.

At a pulp mill, a 400 A feeder made up of three single-conductor cables, one per phase, will enter the top of a steel splitter. How must the cables enter the enclosure?

- A. Through three separate holes in the steel top, each with a non-ferrous connector.
- B. Through three separate holes in the steel top, with the cables derated to 70 %.
- C. Through one common non-ferrous plate that replaces part of the steel top.
- D. Through one common steel plate with three holes and bonding bushings.

Since a new LED wall pack was mounted beside the photocell on a warehouse wall at a distribution yard, the yard lights switch off and back on every few minutes all night. Covering the photocell by day turns the lights on normally. What is the cause?

- A. The LED drivers are overheating and shutting down.
- B. The photocell's built-in turn-off delay has failed.
- C. The photocell is seeing the new wall pack's light.
- D. The contactor is chattering on low control voltage.

At a sawmill, one branch circuit supplies three continuous-duty conveyor motors with full-load current ratings of 34 A, 22 A and 14 A, all of which can run together. Under the CEC, what is the minimum ampacity of the conductors supplying the group?

- A.** 75.1 A
- B.** 78.5 A
- C.** 70.0 A
- D.** 87.5 A

What does a regenerative (four-quadrant) SCR DC drive have in its armature circuit that a non-regenerative drive does not?

- A.** A dynamic braking resistor across the armature.
- B.** A field-weakening bridge for running above base speed.
- C.** A second SCR bridge connected in inverse parallel.
- D.** A freewheeling diode across the armature.

At a conventional detector base in a steel mill, the circuit's positive conductor has separate in and out terminals. An apprentice strips the middle of the unbroken conductor and wraps it under the in terminal only. How must it be terminated?

- A. Leave the loop and jumper the in to the out terminal.
- B. Cut it and land each end on its own terminal.
- C. Wrap the unbroken loop under both terminals.
- D. Cut it and land both ends under the in terminal.

A sawmill's log deck needs a photoelectric sensor to detect logs crossing a 5 m wide infeed, where sawdust hangs in the air and settles on every surface. Which sensing mode is selected?

- A. Diffuse with background suppression, mounted at the deck's edge.
- B. Diffuse, the sensor aimed across the infeed at the passing logs.
- C. Through-beam, emitter and receiver facing across the infeed.
- D. Retroreflective, the sensor on one side and a reflector on the other.

A level transmitter controlling the feed valve on a running pulp mill stock tank must be removed for repair. What is done before the transmitter is isolated or disconnected?

- A. Have operations put the level loop in manual control.
- B. Disconnect it and let the controller hold its last value.
- C. Jumper the transmitter terminals to keep the loop complete.
- D. Close the impulse line block valves at the tank.

03 Answer key

QUESTION	ANSWER	WORK ACTIVITY
Q1	A	Performs common occupational skills
Q2	C	Installs and maintains generating, distribution and service systems
Q3	D	Installs and maintains generating, distribution and service systems
Q4	C	Installs and maintains wiring systems
Q5	C	Installs and maintains wiring systems
Q6	B	Installs and maintains rotating and non-rotating equipment and control systems
Q7	C	Installs and maintains rotating and non-rotating equipment and control systems
Q8	B	Installs and maintains signalling and communication systems
Q9	C	Installs and maintains process control systems
Q10	A	Installs and maintains process control systems

04 More free questions

For the 442A exam itself, the 442A exam guide covers the work activities, their weights and how the exam is scored, and the 442A Industrial Electrician practice exam page describes the full TicketPrep 442A question bank. The same free format is available for the other 13 trades, plus the free guides on the pass mark, question counts, exam day and how to study.

310S

**Automotive Service Technician
questions**

310T

**Truck and Coach Technician
questions**

309A

Electrician questions

403A

Carpenter questions

421A

Heavy Duty Equipment Technician questions

332A

Hairstylist questions

433A

Industrial Mechanic Millwright questions

313A

Refrigeration & AC Systems Mechanic questions

415A

Cook questions

307A

Steamfitter/Pipefitter questions

456A

Welder questions

306A

Plumber questions

429A

Machinist questions

HUB

All free practice questions

GUIDES

The Red Seal exam, explained

How these questions are written and checked: how our questions are made. Found a mistake? Tell us and we will fix it.

05 Questions by exam block

Working on one part of the 442A exam? Each block has its own page with five more free questions, the tasks the block covers and their weights.

BLOCK A • 9% OF THE EXAM

Safety & Commissioning

BLOCK B • 23% OF THE EXAM

Distribution & Transformers

BLOCK C • 20% OF THE EXAM

Raceways, Lighting & Heating

BLOCK D • 21% OF THE EXAM

Starters, Drives & Motors

BLOCK E • 10% OF THE EXAM

Fire Alarm, Comms & Automation

BLOCK F • 17% OF THE EXAM

PLCs & Process Control