

STUDY GUIDE

FOR

METER TECHNICIAN 2, 2A

TEST

TEST NUMBER: 2625

INTRODUCTION

The 2625 Meter Technician 2, 2A Test is a job knowledge test designed to cover the major knowledge areas necessary to perform the job. This Guide contains strategies to use for taking tests and a study outline, which includes knowledge categories, major job activities, and study references.

TEST SESSION

It is important that you follow the directions of the Test Administrator exactly. If you have any questions about the testing session, be sure to ask the Test Administrator before the testing begins. During testing, you may NOT leave the room, talk, smoke, eat, or drink. Since some tests take several hours, you should consider these factors before the test begins.

Mobile phones or other electronic equipment will NOT be allowed in the testing area.

All questions on this test are multiple-choice format and have four possible answers. All knowledge tests will be taken on the computer. Consult the following link and click on Computer Based Testing for more information: www.edison.com/studyguides.

The test has a three-hour time limit. A scientific calculator will be provided for you to use during the test. The calculator provided during the test session will be one of these models:

- Casio fx-250HC,
- Texas Instruments TI-30XA,
- Texas Instruments TI-36X

You will NOT be able to bring or use your own calculator during testing.

You will receive a Test Comment form so that you can make comments about test questions. Write any comments you have and turn it in with your test when you are done.

STUDY GUIDE FEEDBACK

At the end of this Guide, you have been provided with a Study Guide Feedback page. If a procedure or policy has changed, making any part of this Guide incorrect, your feedback would be appreciated so that corrections can be made.

ASSESSMENT TAKING STRATEGIES

The test contains multiple-choice questions. The purpose of this section is to suggest techniques for you to use when taking one.

Your emotional and physical state during the test may determine whether you are prepared to do your best. The following list provides common sense techniques you can

CONFIDENCE

If you feel confident about passing the test, you may lose some of your anxiety. Think of the test as a way of demonstrating how much you know, the skills you can apply, the problems you can solve, and your good judgment capabilities.

PUNCTUALITY

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CONCENTRATION

Try to block out all distractions and concentrate only on the test. You will not only finish faster but you will reduce your chances of making careless mistakes. If possible, select a seat away from others who might be distracting. If lighting in the room is poor, sit under a light fixture. If the test room becomes noisy or there are other distractions or irregularities, mention them to the Test Administrator immediately.

BUDGET YOUR TIME

Pace yourself carefully to ensure that you will have enough time to complete all tasks/functions.

READ CRITICALLY

Read all directions and questions carefully.

Remember that the techniques described in this section are only suggestions. You should follow the test taking methods that work best for you. If particular questions seem difficult to understand, make a note of them, continue with the test and return to them later.

MAKE EDUCATED GUESSES

Make an educated guess if you do not know the answer or if you are unsure of it.

DOUBLE-CHECK MATH CALCULATIONS

Use scratch paper to double check your mathematical calculations.

REVIEW

If time permits, review your answers. Do the questions you skipped previously.

Make sure each multiple-choice question has your correct answer selected.

Remember the techniques described in this section are only suggestions. You should follow the test taking methods that work best for you.

JOB KNOWLEDGE CATEGORIES AND STUDY REFERENCES

Below are the major job knowledge areas (topics) covered on the 2625 Meter Technician 2, 2A Test and the associated study references. Listed next to each knowledge category is the number of items on the exam that will measure that topic. You can use this information to guide your studying. Some exams also contain additional pretest items. Pretest items will appear just like all the other items on your exam, but they will not affect your score. They are an essential part of ensuring the 2625 Meter Technician 2, 2A Test remains relevant to successful performance of the job.

There are a total of 127 items on the 2625 Meter Technician 2, 2A Test and the passing score is 70%. This score was determined during the test validation process.

METERING AND ELECTRICAL THEORY (72 items)

Knowledge of Single-phase metering principles including: meter wiring; meter calibration; meter construction; meter characteristics; meter phases; testing standards; meter containment; testing procedures; register multipliers; Ohm's Law; Blondell's theory of metering; electromechanical theory; energy and demand registers; heat dissipation in conductors; magnetic theory; AC and DC theory; capacitive reactance; converting energy; current transformer ratios; current and voltage in phase relationships; electromotive force; frequency; fuses; impedance and inductive reactance; phase angles; polarity; power consumption; power factor; and primary and secondary current. Knowledge of electrical theory including inductive, resistive, and capacitive circuits; amplifiers; repairing and calibrating hi pot equipment; transducers; basic troubleshooting techniques for electronic components; rectifiers for power supplies; Kirchoff's law; Thevenin's theorem; logic circuits; impedance; amplifiers; transistors; diodes; analyzing electronic components and determining defects. Ability to read and analyze phase diagrams as well as read electrical drawings, schematics, and procedures.

References

- Alexander, Richard. Pocket Guide to Watthour Meters. 4th Ed. 2010.
- EEI Meter and Service Committee, Handbook for Electricity Metering. 11th Ed. 2014.
- Hart, George. Ugly's Electrical References. Burleson Distributing Corporation, 2005.
- Mileaf, Harry, ed. Electricity One-Seven. 2nd ed. New Jersey: Prentice Hall, 1996.
- EMS Meter Shop Meter Technician Training: Singlephase and Polyphase course materials and references (2013).
- Resources on the Meter Shop SharePoint (for example, job aids and procedures, meter codes, technical manuals for serviced meters, etc...).

SAFETY (38 items)

Knowledge of safety procedures and standards associated with the duties of a Meter Technician 2 including knowledge of: SCE's Accident Prevention Manual as it relates to all work being performed; general first aid (for example, electrical shock, procedures for reporting emergencies, etc...); hearing standards and protection; how to handle electrical equipment and power tools (for example, grounding techniques, de-energizing equipment, voltage requirements, etc...); lifting techniques; general safety behaviors (for example, maintaining a safe work space, ladder use, etc...).

References

- Related sections in The SCE Accident Prevention Manual*:
 1. Policy Section
 2. General Rules
 3. First Aid Rules
 4. Definitions

MATH (17 items)

Knowledge of mathematic principles necessary for testing meter and performing other metering calculations (for example, calculating register ratios, etc...) including: algebra, fractions, decimals, units of measurement.

References

- www.math.com
- Any basic math book that covers the concepts listed above.
- Alexander, Richard. Pocket Guide to Watthour Meters. 4th Ed. 2010.
- EEI Meter and Service Committee, Handbook for Electricity Metering. 11th Ed. 2014.
- Hart, George. Ugly's Electrical References. Burleson Distributing Corporation, 2005.
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- EMS Meter Shop Meter Technician Training: Singlephase and Polyphase course materials and references (2013).



STUDY GUIDE FEEDBACK

Please use this page to notify us of any changes in policies, procedures, or materials affecting this guide.

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Test Name: 2625 Meter Tech 2 Knowledge Test

COMMENTS: