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| Multiple Choice |

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| 1. The open-circuit voltage between the two terminals of a single-pole switch on a lighting circuit when the switch is in the OFF position is \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | zero | |  | b. | 60 volts | |  | c. | 120 volts | |  | d. | 240 volts |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | Safety in the Workplace | |

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| 2. An arc flash can produce temperatures of \_\_\_\_°F.   |  |  |  | | --- | --- | --- | |  | a. | 3,500 | |  | b. | 15,000 | |  | c. | 25,000 | |  | d. | 35,000 |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | Arc Flash | |

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| 3. For safety, it is very important that electrical equipment be “listed” by the \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | *NEC* | |  | b. | OSHA | |  | c. | NRTL | |  | d. | ANSI |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | Listed Equipment and Nationally Recognized Testing Laboratories (NRTL) | |

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| 4. Footwear suitable for electrical work is marked with the letters \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | CF | |  | b. | EH | |  | c. | OSHA | |  | d. | PPE |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | Personal Protective Equipment | |

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| 5. The *National Electrical Code* is revised every \_\_\_\_ years so as to be as up to date as possible.   |  |  |  | | --- | --- | --- | |  | a. | two | |  | b. | three | |  | c. | four | |  | d. | five |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | National Electrical Code (NEC) | |

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| 6. The term *approved* means to be \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | listed by a Nationally Recognized Testing Laboratory (NRTL) | |  | b. | acceptable to the *National Electrical Code* | |  | c. | acceptable to the architect or engineer designing the job | |  | d. | acceptable to the authority having jurisdiction |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | Building Codes | |

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| 7. As defined in *Article 100*, a dwelling unit has the following feature(s): \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | permanent provisions for living, sleeping, cooking, and sanitation | |  | b. | living, sleeping, and basement or storage areas | |  | c. | space for eating, sleeping, and recreation | |  | d. | optional garage space |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | Building Codes | |

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| 8. All measurements in the *National Electrical Code* are shown in which system(s) of units?   |  |  |  | | --- | --- | --- | |  | a. | inch-pound (English) only | |  | b. | SI (metric) only | |  | c. | both inch-pound and metric values | |  | d. | both natural units and physical units |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | Metrics (SI) and the NEC | |

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| 9. In the international system of units, the prefix *kilo-* means \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | hundred | |  | b. | thousand | |  | c. | million | |  | d. | billion |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | Metrics (SI) and the NEC | |

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| 10. In the international system of units, the prefix *milli-* means \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | one hundredth | |  | b. | one thousandth | |  | c. | one millionth | |  | d. | one billionth |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | Metrics (SI) and the NEC | |

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| 11. Nationally Recognized Testing Laboratories (NRTL) \_\_\_\_ electrical products to provide a basis for approval by inspectors in the field.   |  |  |  | | --- | --- | --- | |  | a. | approve | |  | b. | test and list | |  | c. | develop standards | |  | d. | endorse |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | Listed Equipment and Nationally Recognized Testing Laboratories (NRTL) | |

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| Completion |

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| 12. Always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the power before working on an electrical circuit.   |  |  | | --- | --- | | *ANSWER:* | turn off | | *POINTS:* | 1 | | *REFERENCES:* | Safety Cannot Be Compromised! | |

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| 13. Every time an electrician makes a decision concerning the electrical wiring, the decision should be checked by reference to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | | *ANSWER:* | *Code*  *NEC*  *National Electrical Code* | | *POINTS:* | 1 | | *REFERENCES:* | Language Conventions | |

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| 14. The *authority having jurisdiction* over electrical construction is generally the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | | *ANSWER:* | electrical inspector | | *POINTS:* | 1 | | *REFERENCES:* | Building Codes | |

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| 15. The use of the word *shall* indicates a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rule.   |  |  | | --- | --- | | *ANSWER:* | mandatory | | *POINTS:* | 1 | | *REFERENCES:* | Language Conventions | |

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| 16. Nationally Recognized Testing Laboratories (NRTL) test and evaluate products for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | | *ANSWER:* | safety | | *POINTS:* | 1 | | *REFERENCES:* | Listed Equipment and Nationally Recognized Testing Laboratories (NRTL) | |

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| Subjective Short Answer |

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| 17. What is the *NEC* definition of a “Qualified Person”?   |  |  | | --- | --- | | *ANSWER:* | Article 100 in the *NEC* defines a qualified person as: "one who has the skills and knowledge related to the construction and operation of the electrical equipment and installations and has received safety training to recognize and avoid the hazards involved". | | *POINTS:* | 1 | | *REFERENCES:* | Safety in the Workplace | |

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| 18. What is the purpose of the *National Electrical Code*?   |  |  | | --- | --- | | *ANSWER:* | The purpose of this *Code* is the practical safeguarding of persons and property from hazards arising from the use of electricity. | | *POINTS:* | 1 | | *REFERENCES:* | National Electrical Code (NEC) | |