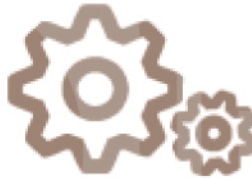


Experienced Worker Assessment Blueprint

Electrical Construction

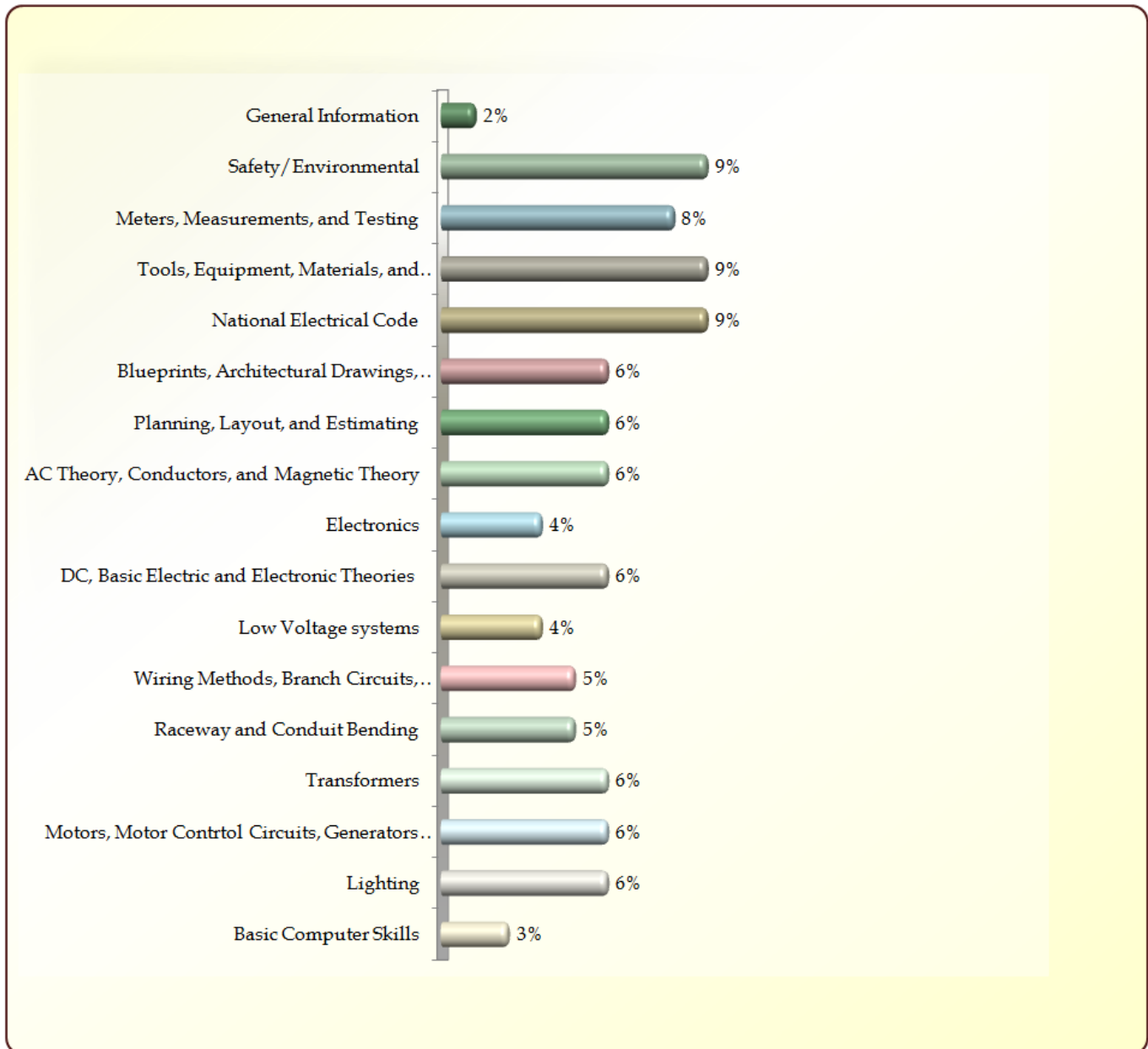


Written Assessment:

Administration Time: 3 hours

Number of Questions: 200

Areas Covered:



Sample Questions:

The purpose of the Occupational Safety and Health Act is to

- A. prevent accidents on construction jobs by more preventive action
- B. remove all hazardous conditions on job sites as the conditions appear
- C. assure every working man and woman, so far as possible, healthful working conditions
- D. enforce safety laws of the state where those laws lack enforcement power

How many cubic yards of concrete would you have to order for a duct bank which measures 4 feet by 2 feet by 400 feet?

- A. 110
- B. 119
- C. 1,067
- D. 3,200

On building plans or blueprints, the electrician can expect to find

- A. plot, floor, elevation, and section details
- B. schematics
- C. names of people to call for help
- D. code explanations

The NEC recognizes a low-voltage system as one that is

- A. less than 24 volts
- B. less than 50 volts
- C. less than 75 volts
- D. less than 120 volts

The current in the primary winding of a transformer is determined mainly by the

- A. phase voltage
- B. winding impedance
- C. secondary load
- D. line voltage



Performance Assessment:

Administration Time: 2 hours and 20 minutes

Number of Jobs: 4

Areas Covered:

46% Motor and Control Wiring

Material selection, troubleshooting, motor reversing, installation of conductors, installation of components and test circuit.

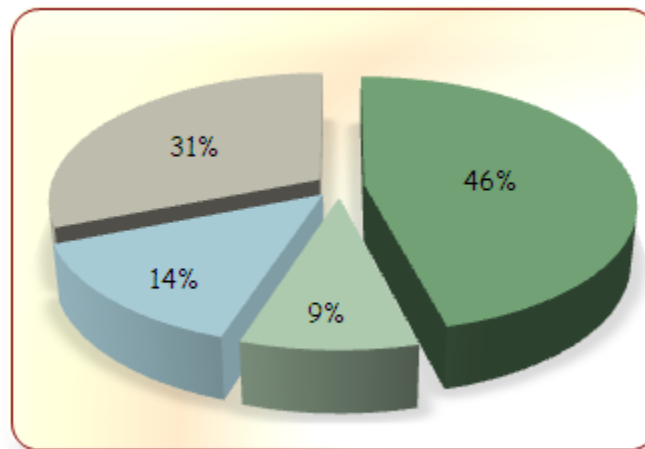
9% Identify Trade Names

14% Locate Bad Components Using a VOM

Use of meter to test components and identification of problem.

31% Troubleshooting Bad Components

Troubleshooting live circuit, use of meter and recommendation for repair.



Sample Job: Motor and Control Wiring

Estimated Job Time: 1 hour and 40 minutes

Participant Activity: The participant will complete the wiring diagram provided using the power control transformer and connect the three-phase starter with 2 stop/start stations to a 3-phase motor. The evaluator will specify the control and motor circuit voltages. Participant will select proper overloads and the proper fuses for the motor being connected. Participant will then check and record the motor running circuit, de-energize the circuit and reverse the rotation of the motor.

