**Written Assessment:**

**Administration Time:** 3 hours  
**Number of Questions:** 150

**Areas Covered:**

- General Trade Information: 3%
- Electrical: 23%
- Reading Diagrams and Calculations: 16%
- Motors and Generators: 3%
- Wiring Controls: 4%
- Lighting: 3%
- Symbols and Digital: 5%
- Microprocessors/Systems: 3%
- Programmable Logic Controls: 20%
- Basic Electronics Level I: 13%
- Basic Electronics Level II: 7%
Sample Questions:

The proper way to check for a good ground in a power tool is between
A. the front and rear areas of the case
B. either the hot or the neutral prong of the plug and the ground wire prong
C. the hot and neutral prong of the plug
D. the case and the ground wire prong

All starters are basically rated in
A. ohms
B. volts
C. frequency
D. horsepower

In order to reverse the direction of a split-phase motor, it is necessary to
A. interchange the line leads
B. reverse the connections to both the starting and running windings
C. reverse the wires to the capacitor
D. reverse the connections to the starting winding

What type of switch circuit is indicated by an OR gate?
A. parallel
B. series parallel
C. parallel series
D. series

When power is removed from a PC
A. the Executive Memory is usually lost
B. the User Program is often maintained by a Battery Backup system
C. the ROM will usually have to be reprogrammed
D. the Application Memory will usually not be affected