Written Assessment:

Administration Time: 3 hours
Number of Questions: 184

Areas Covered:

- Mechanical Drive Components and Couplings: 16%
- Pumps, Seals, and Bearings: 4%
- Mechanical Knowledge and Safety: 9%
- Machining Operations: 5%
- Machining Measurements: 4%
- Machining General Knowledge and Safety: 2%
- Electrical Motors: 4%
- Electrical Schematics/Symbols: 7%
- Electrical Drives: 11%
- AC/DC Theory: 8%
- National Electrical Code and Safety: 6%
- Electronics Theory/Ohm’s Law: 8%
- Electronic Drives/Controls: 3%
- Semiconductors: 8%
- Programmable Logic Controllers: 5%
Sample Questions:

The belts in a multiple V-belt should be replaced
   A. in pairs
   B. in matched sets
   C. singly
   D. in unmatched sets

Discoloration of the bearing indicates that it has been
   A. over torqued
   B. overheated
   C. discolored by the process steam
   D. the wrong alloy was used in manufacture

In order to reverse the direction of rotation of a three-phase motor, it is necessary to
   A. reverse the connections to the armature
   B. reverse the connections to the rotor
   C. switch all three line connectors
   D. reverse any two of the line connectors

When installing a switch to control a circuit having a neutral, care should be taken to install the switch in series with the ________ conductor.
   A. grounded
   B. hot
   C. neutral
   D. underground

Because switches can fail, after opening a disconnect it is always safest to
   A. test the power circuit on the load side of the disconnect, sometimes called the downstream side of the disconnect
   B. test the power circuit on the line, or upstream side of the disconnect
   C. test the control circuit
   D. lock and tag the disconnect