TRUE/FALSE

1. The 120 VAC circuit is normally protected by a single fuse or circuit breaker.

   ANS: T PTS: 1 REF: Protective Factors

2. Switching voltage surges are usually limited to three times normal voltage.

   ANS: T PTS: 1 REF: Voltage and Frequency Surges

3. By programming a motor-protective relay unit with the motor's electrical characteristics, the unit's algorithm will automatically tailor the optimal protection curve to the motor being monitored.

   ANS: T PTS: 1 REF: Programmable Motor Protection

MULTIPLE CHOICE

1. The typical fuse consists of an element surrounded by a filler and enclosed by the fuse body. The element is a calibrated ____.
   a. insulator
   b. transistor
   c. conductor
   d. capacitor

   ANS: C PTS: 1 REF: Fuse Construction and Operation

2. Peak let-thru current (I_p) and ampere squared seconds (I_{2t}) are two measures for the degree of ____ provided by a fuse.
   a. current limitation
   b. time delay
   c. circuit isolation
   d. rectification

   ANS: A PTS: 1
   REF: Peak Let-Thru Current (Ip) and Ampere Squared Seconds (I2t)

3. ____ is the current-limiting characteristic of a transformer and is expressed as a percent.
   a. Capacitance
   b. Impedance
   c. Ampacity
   d. Rectification

   ANS: B PTS: 1 REF: Selecting Protective Devices

4. The main purpose of a ground fault circuit interrupter (GFCI) is to ____.
   a. determine the interrupting capacity
   b. calculate the available current
   c. protect a person from electrical shock
   d. gauge the ambient temperature

   ANS: C PTS: 1 REF: Ground Fault Circuit Interrupter

COMPLETION

1. All protective devices have a published _____, which is defined as the highest current at rated voltage that a device can safely interrupt.

   ANS: interrupting capacity

PTS: 1 REF: Fuse Types

2. _____ fuses are used today in almost all fuse applications.

   ANS:
   Current-limiting time-delay
   Current limiting time delay

   PTS: 1 REF: Fuse Types

3. Adding a(n) _____ to the nonautomatic circuit breaker, by using a bimetallic element in each pole of the breaker, provides automatic tripping.

   ANS: thermal trip unit

   PTS: 1 REF: Circuit Breaker Types