1. You are a facility maintenance manager and you have several sections of medium-voltage switchgear. This equipment has a high reliability requirement and is in good condition. According to ANSI/NETA MTS-2011, how often should it be electrically tested and maintained?
   a. 6 months
   b. 12 months
   c. 18 months
   d. 24 months

2. Cable connected to bus using lugs is always an issue. My experience has been that when checked for tightness every three years, roughly 50 percent of the connections require retorquing. What three methods does ANSI/NETA MTS-2011 recommend for checking for connection problems?
   a. ___________________
   b. ___________________
   c. ___________________

3. Using ANSI/NETA ATS-2009 as a reference, what is the minimum voltage to be used for performing a dc overpotential test on 15 kV switchgear?
   a. 15 kV
   b. 25 kV
   c. 27 kV
   d. 37 kV

4. ANSI/NETA ATS-2009 recommends what maximum value of leakage current when performing the dc overpotential test on 15 kV switchgear?
   a. 1 Megohm/kV test voltage plus 1 Megohm
   b. 1.0 microampere
   c. 100 microamperes
   d. No failure of insulation

5. What is the minimum insulation resistance of control wiring in switchgear based on ANSI/NETA MTS-2007?
   a. 1 Megohm
   b. 2 Megohm
   c. 4 Megohm
   d. No failure of insulation
ANSWER 1
1. You are a facility maintenance manager and you have several sections of medium-voltage switchgear. This equipment has a high reliability requirement and is in good condition. According to ANSI/NETA MTS-2011, how often should it be electrically tested and maintained?
   a. 6 months
   b. Using Appendix B, switchgear with a high reliability requirement and in good condition would have a multiplication factor of 0.5. The recommended interval for electrical testing and maintenance is 24 months, so it would be 0.5 x 24 months = 12 months.
   c. 18 months
   d. 24 months

ANSWER 2
2. Cable connected to bus using lugs is always an issue. My experience has been that when checked for tightness every three years, roughly 50 percent of the connections require retorquing. What three methods does ANSI/NETA MTS-2011 recommend for checking for connection problems?
   a. Using a microhmmeter
   b. Using a calibrated torque wrench
   c. Performing a thermographic survey

ANSWER 3
3. Using ANSI/NETA ATS-2009 as a reference, what is the minimum voltage to be used for performing a dc overpotential test on 15 kV switchgear?
   a. 15 kV
   b. 25 kV
   c. 27 kV
   d. 37 kV

ANSWER 4
4. ANSI/NETA ATS-2009 recommends what maximum value of leakage current when performing the dc overpotential test on 15 kV switchgear?
   a. 1 Megohm/kV test voltage plus 1 Megohm
   b. 1.0 microampere
   c. 100 microamperes
   d. No failure of insulation

ANSWER 5
5. What is the minimum insulation resistance of control wiring in switchgear based on ANSI/NETA MTS-2007?
   a. 1 Megohm
   b. 2 Megohm
   c. 4 Megohm
   d. No failure of insulation

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