Homework G + F

Name: _____ Class: _____ Date: _____ ID: A

**Code Calculation lesson 2 homework QUESTIONS ON BACK Instructor ; J. DeMello**

**Multiple Choice**
*Identify the choice that best completes the statement or answers the question.*

____ 1. Where different temperature limitations of individual componenets are applied to a single circuit, the principle of the _____ is often used to determine the temperature rating of the entire circuit.
a. double effect
b. rolling stone
c. strongest will survive
d. weakest link

____ 2. The temperature rating associated with the ampacity of a conductor shall be selected and coordinated so as not to exceed the _____ temperature rating of any connected termination , conductor , or device
a. average
b. highest
c. lowest
d. standard

____ 3. The three most common insulated conductor temperature ratings associated with Table 310.15(B)(16) are _____
a. 60 , 70 , and 90 degree Celsius
b. 60 , 75 , and 90 degree Celsius
c. 65 , 75 , and 95 degree Celsius
d. 65 , 75 , and 110 degree Celsius

____ 4. Are THHN 90 degree Celsius conductors permitted to be connected to the terminals of a circuit breaker and used at their 90 degree C ampacities as shown in Table 310.15(B)(16) ?
a. Always
b. Only if circuit breaker is approved for such use
c. Only if the circuit breaker is listed and identified for such use
d. Never

____ 5. The two most common conductor terminal temperature ratings associated with circuit breakers and other equipment rated 100 amps or less are _____
a. 60 degree C and 75 degree C
b. 60 degree C and 90 degree C
c. 60 degree C and 140 degree C
d. 60 degree C and 167 degree C

____ 6. In addition to temperature ratings of wire terminals, a circuit breaker may be marked with another temperature rating such as 25 degree C or maybe even as high as 40 degree C. This marking most likely specifies the _____ temperature
a. Ambient
b. Conductor
c. Internal
d. Terminal

____ 7. A 10 AWG THWN copper conductor is connected to a circuit breaker with termination temperature limitation marked (not to exceed) 60 degree C. What is the allowable ampacity of this conductor now that it is connected to this circuit breaker ?
a. 25 Amps
b. 30 Amps
c. 35
d. 40

____ 8. a 14 AWG XHHW-2 copper conductor is connected to a circuit breaker with termination temperature limitation marked (not to exceed) 60 degree C. What is the allowable ampacity of this conductor now that it is connected to this circuit breaker ?
a. 12 Amps
b. 15 Amps
c. 10 Amps
d. 14 Amps

____ 9. Two 8 AWG XHHW-2 copper conductors are connected to a two-pole circuit breaker with termination temperature limitation marked (not to exceed) 60/75 degree Celsius. What is the allowable ampacity of these conductors now that they are connected to this two-pole circuit breaker ?

a. 45 amps
b. 55 amps
c. 50 amps
d. 60 amps

____ 10. An existing 12 AWG TW copper conductor is connected to a new replacement circuit breaker with termination limitation marked (not to exceed) 60/75 degree Celsius.What is the allowable ampacity of this conductor now that it is connected to this circuit breaker?

a. 25 amps
b. 15 amps
c. 30 amps
d. 20 amps

____ 11. First Part , Determine the minimum circuit conductor size for each non-continuous load of 27 kilowatts. Two 3-phase circuits are installed in a single EMT raceway

a. 6 AWG THHN copper
b. 8 AWG THHN copper
c. 4 AWG THWN copper
d. 4 AWG THHN copper

____ 12. Second Part , Determine the minimum circuit breaker size for each non-continuous load. Calculate the ampacity of the conductors. Calculate to the nearest ampere.

a. 25 Amp circuit breaker
b. 35 Amp circuit breaker
c. 20 Amp circuit breaker
d. 30 Amp circuit breaker