EET1033 Fund of DC/AC H-2 Electrical Quantities and Ohm's Law

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

____ 1. The ____ is a measurement of the amount of electricity that is flowing through a circuit.
a. ampere
b. ohm
c. volt
d. watt

____ 2. ____ states that since electrons are negative particles, current flows from the most negative point in the circuit to the most positive.
a. The conventional current flow theory
b. Ohm's Law
c. Electromotive force
d. The electron theory

____ 3. ____ states that current flows from the most positive point in a circuit to the most negative.
a. The conventional current flow theory
b. Ohm's Law
c. Electromotive force
d. The electron theory

____ 4. In an electrical circuit, the ____ offers resistance to the circuit and limits the amount of current that can flow.
a. voltage
b. load
c. neutron
d. proton

____ 5. A ____ circuit is a circuit with very little or no resistance.
a. open
b. complete
c. short
d. grounded

____ 6. A circuit where a path other than the one intended is established to ground is said to be ____.
a. open
b. shorted
c. complete
d. grounded

____ 7. A conductor connected to the case of an appliance to provide a low-resistance path to ground is called a(n) ____ conductor.
a. grounded
b. grounding
c. neutral
d. ungrounded

____ 8. The ____ conductor provides the return path and completes the circuit back to the power source.
a. grounding
b. grounded
c. neutral
d. either b or c

____ 9. Electrical current will flow through the ____ conductor only when a circuit fault develops.
a. grounded
b. grounding
c. neutral
d. ungrounded

____ 10. The ____ conductor is used to help prevent a shock hazard in the event that the hot conductor comes in contact with the case or frame of an appliance.
a. grounded
b. grounding
c. neutral
d. ungrounded

____ 11. ____ push current through a wire but cannot flow through the wire.
a. Amps
b. Ohms
c. Volts
d. Watts

____ 12. The letter ____ is used to represent voltage in algebraic formulas.

a. F
b. P
c. E
d. L

____ 13. A(n) ____ is the amount of resistance that allows one ampere of current to flow when the applied voltage is one volt.
a. coulomb
b. joule
c. ohm
d. watt

____ 14. ____ is a measure of the amount of power being used in a circuit.
a. Amperage
b. Ohms
c. Voltage
d. Wattage

____ 15. Electrical energy must be changed or converted into some other form of energy before there can be ____.
a. amps
b. ohms
c. volts
d. watts

____ 16. A ____ is the amount of force required to raise a one-pound weight one foot.
a. joule
b. foot-pound
c. horsepower
d. watt

____ 17. The amount of electrical energy needed to produce one horsepower is ____ watts.
a. 467
b. 674
c. 746
d. 647

____ 18. A(n) ____ is the amount of work done by one watt for one second.
a. ampere
b. joule
c. ohm
d. volt

____ 19. When using Ohm's Law to determine amperage, the formula you would use is ____.
a. I = R/E
b. E = I/R
c. I = E/R
d. I = R/V

____ 20. When using Ohm's Law to determine voltage, the formula you would use is ____.
a. E = I × R
b. E = V × A
c. E = V × R
d. E = V × I