

NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_

ID: A

Course: Basic Principles/Industrial Electricity  
Course#: ELC191  
Topic: Quiz  
Instructor: Mr. Lombardo

### ELC191 Quiz SG1

**Please remove all items from your desk.**  
**This is a closed textbook quiz worth 27 points.**  
**Please PRINT the letter of the *BEST* answer in the space provided.**  
**Any unanswered questions will be graded as incorrect.**  
**You will have 50 minutes to complete this exam. Good Luck!**

#### Multiple Choice

- \_\_\_\_\_ 1. A conductor is normally made of atoms with \_\_\_\_\_ electrons in the valance shell.  
A. five or six  
B. seven or eight  
C. four  
D. one to three
- \_\_\_\_\_ 2. The unit of electrical power is the  
A. volt  
B. watt  
C. ohm  
D. ampere
- \_\_\_\_\_ 3. The current flow, resistor voltages, and / or resistances in a series circuit can be found by using \_\_\_\_\_ law.  
A. Ampere's  
B. Volt's  
C. Ohm's  
D. Coulomb's
- \_\_\_\_\_ 4. What is the term for an amount of charge equal to  $6.25 \times 10^{18}$  electrons?  
A. coulomb  
B. volt  
C. watt  
D. ampere
- \_\_\_\_\_ 5. The three principle parts of an atom are  
A. neutron, quark, and electron  
B. electron, proton, and quark  
C. electron, neutron, and proton  
D. neutron, positron, and electron
- \_\_\_\_\_ 6. A flow of one coulomb per second past a point in a circuit describes a(n)  
A. volt  
B. watt  
C. ohm  
D. ampere
- \_\_\_\_\_ 7. The unit of resistance is the  
A. volt  
B. ampere  
C. ohm  
D. watt



- \_\_\_\_\_ 8. The most common method of producing electricity is through the use of  
A. light C. chemicals  
B. magnetism D. friction
- \_\_\_\_\_ 9. The part of an atom that has a negative charge is the  
A. proton C. quark  
B. neutron D. electron
- \_\_\_\_\_ 10. Current that flows in both directions is called bidirectional. It is also referred to as \_\_\_\_\_  
current.  
A. direct B. alternating
- \_\_\_\_\_ 11. The part of an atom that has no charge is the  
A. proton C. quark  
B. electron D. neutron
- \_\_\_\_\_ 12. Valance electrons are contained in the \_\_\_\_\_ shell.  
A. middle C. outermost  
B. bottom D. innermost
- \_\_\_\_\_ 13. Electricity is the flow of  
A. quarks C. protons  
B. electrons D. neutrons
- \_\_\_\_\_ 14. A circuit that has only one path for current flow is a \_\_\_\_\_ circuit.  
A. series B. parallel
- \_\_\_\_\_ 15. The law of charges states that like charges \_\_\_\_\_ and opposite charges \_\_\_\_\_.  
A. attract, attract C. attract, repel  
B. repel, repel D. repel, attract
- \_\_\_\_\_ 16. The geographic north pole of the earth is magnetically a \_\_\_\_\_ pole.  
A. north B. south
- \_\_\_\_\_ 17. The unit of electromotive force is the  
A. ampere C. ohm  
B. volt D. watt
- \_\_\_\_\_ 18. The nucleus of an atom contains  
A. electrons and quarks C. neutrons and quarks  
B. neutrons and protons D. electrons and protons



- \_\_\_\_\_ 19. In a series circuit with two resistors, the total resistance is equal to the \_\_\_\_\_ of the two resistors.  
A. sum  
B. product over the sum  
C. difference  
D. quotient
- \_\_\_\_\_ 20. The part of an atom that has a positive charge is the  
A. electron  
B. proton  
C. neutron  
D. quark
- \_\_\_\_\_ 21. A basic law of magnetism states that like poles \_\_\_\_\_ and opposite poles \_\_\_\_\_.  
A. attract, repel  
B. repel, attract
- \_\_\_\_\_ 22. Current that flows in only one direction is called unidirectional. It is also referred to as \_\_\_\_\_ current.  
A. direct  
B. alternating
- \_\_\_\_\_ 23. In order to have current flow, a circuit must be  
A. open  
B. closed  
C. grounded  
D. shorted
- \_\_\_\_\_ 24. Objects charged with different type of charges will draw toward each other. This is referred to as  
A. attraction  
B. repulsion
- \_\_\_\_\_ 25. Objects charged with the same type of charge will push each other away. This is referred to as  
A. repulsion  
B. attraction
- \_\_\_\_\_ 26. An insulator is normally an atom with \_\_\_\_\_ electrons in the valance shell.  
A. five or six  
B. four  
C. seven or eight  
D. one to three
- \_\_\_\_\_ 27. An element cannot be chemically subdivided into other elements. The smallest amount of an element is a(n)  
A. neutron  
B. electron  
C. atom  
D. proton

