Name: _____

Date: _____ Grade: _____

SECTION QUIZ 9-3



Remember:
Score an average of 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.5 points.

1. In the vacuum tube diode the filament is a source of: _____.
   (a) electromagnetic waves (c) sound waves
   (b) electrons (d) heat

2. A diode is a one-way path for _____.

3. An alternating current that has been made to flow in only one direction has been: _____.
   (a) amplified (b) hertzed (c) rectified (d) diode

4. The abbreviation for a light emitting diode is _____.

5. Radio waves have a _____ frequency than visible light.
   (a) heavier (b) higher (c) lower (d) more

6. The unit for cycles per second in the metric system is: _____.
   (a) Edison (b) Fleming (c) rpm (d) Hertz

7. _____ is the process of changing some part of an electric signal so it carries information.

8. The first radios sent messages by _____ code.

9. A quart crystal produces a small electric current when it is: _____.
   (a) doused with water (c) heated white hot
   (b) frozen (d) squeezed

10. _____ modulation changes the strength of radio waves to carry sound.
    (a) Amplitude (b) Frequency (c) Increased (d) Decreased

11. The broadcast method that requires more bandwidth is _____ modulation.
    (a) amplitude (b) frequency (c) decreased (d) digital

12. The radio band that experiences less interference is the _____ band.
    (a) CD (b) AM (c) FM (d) CB

13. To amplify weak radio signals, one would use a _____.

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14. The purpose of the grid in Lee De Forest's triode was to: _____.
    (a) amplify electric currents (c) detect earthquakes
    (b) coat metals with silver (d) sift out bad signals

15. Vacuum tubes were used in: _____.
    (a) laboratories (c) integrated circuits
    (b) the computer, ENIAC (d) vacuum cleaners

16. All electromagnetic waves travel at the speed of _____.

17. The velocity of a wave can be found provided one knows the frequency and _____.

18. Velocity of a wave can be found by _____ the frequency and wavelength.
    (a) subtracting (b) adding (c) dividing (d) multiplying

19. _____is a process of changing high frequency radio waves back into the lower frequency of sound waves.

20. A semiconductor is a good electrical conductor.
    (a) True or (b) False

21. _____ is an example of a semiconductor.
    (a) Copper (b) Silver (c) Oxygen (d) Silicon

22. Silicon and carbon are in the same chemical family in the periodic table.
    (a) True or (b) False

23. A *n-type* semiconductor has _____ electrons.
    (a) too few (b) extra (c) enough (d) insufficient

24. A *p-type* semiconductor has _____ electrons.
    (a) too few (b) extra (c) enough (d) insufficient

25. In a _____, the base controls how well electricity flows between emitter and collector.

26. Today, integrated circuits may contain _____ devices.
    (a) 5 (b) 12 (c) 50,000 (d) 100 million

27. Hertz is a metric unit for _____.

28. As computers became faster, the speed of light became a _____ _____.

29. Many devices use AA or AAA batteries, with _____ being the smallest.

30. A _____ _____ has all devices connected in a single path.

31. The number of paths in a series circuit is _____.

32. Doubling the resistance of a series circuit _____ the current that flows.
    (a) increases (b) doubles (c) triples (d) reduces

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33. In a _____ circuit, the current remains the same throughout the circuit.

34. The total resistance of a series circuit is the _____ of the individual resistances.
(a) product (b) difference (c) sum (d) reversal

35. In a _____ circuit, the total current is found by adding individual currents in each path.

36. *"_____ is the fuel that allows ordinary people to produce uncommon results."*

37. *"_____ is the art of getting people to do what you want them to do because they want to do it."*

38. *"The first requisite for _____ is the ability to apply your physical and mental energies to one problem incessantly without growing weary.*

39. *"No act of kindness, no matter how small, is ever _____."*

40. *"Ask and it will be _____ to you; seek and you will find; knock and the door will be opened to you."*