

Answers

Chapter 1

STUDY QUESTIONS

1. electron theory
2. molecule
3. atom
4. element
5. compound
6. nucleus
7. positive/negative
8. neutral
9. positive ion/negative ion
10. free electrons
11. valence orbit
12. valence electrons
13. semiconductors
14. insulators
15. semiconductors
16. electrostatics
17. electron
18. hole
19. polarity
20. current
21. ampere
22. I
23. amps
24. electromotive force
25. volt
26. volt
27. voltage
28. E/V
29. ohm
30. R
31. Insulators
32. power user
33. distribution device
34. control device
35. magnet
36. magnetic variation
37. permeability
38. high
39. low
40. temporary
41. permanent
42. magnetic flux
43. rel
44. Electromagnets
45. solenoid
46. relays
47. low-current
48. static electricity
49. Piezoelectricity
50. photoelectric effect
51. thermoelectric effect
52. thermocouple
53. Electromagnetic induction
54. electromagnetic induction
55. relative motion

Chapter 1

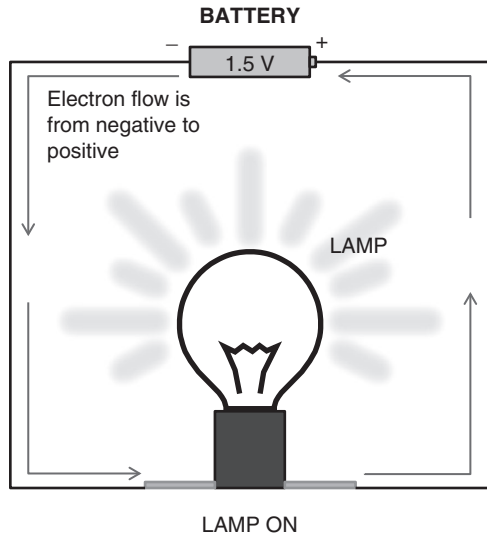
MULTIPLE-CHOICE QUESTIONS

1. c
2. d
3. b
4. c
5. d
6. a
7. a
8. b
9. b
10. b

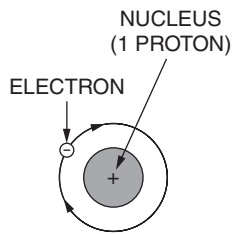
Chapter 1

APPLICATION QUESTIONS

- four
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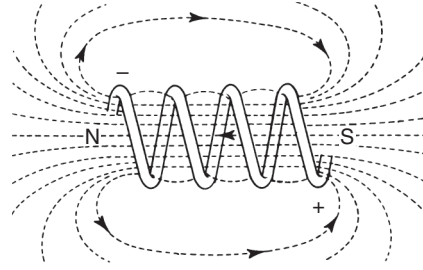
3.



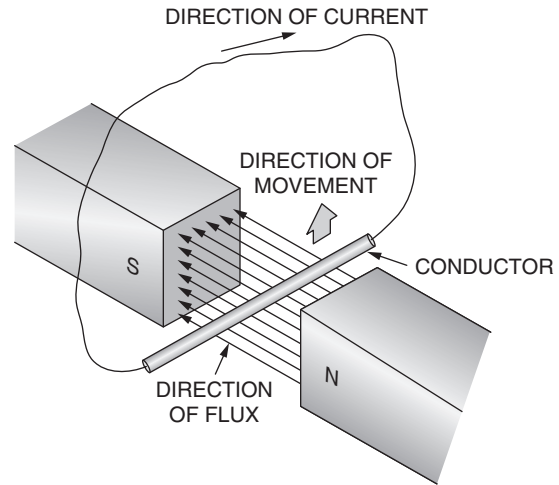
HYDROGEN ATOM

- solenoid
 - relay
- pivot
 - armature
 - insulated stop
 - contact points
 - spring
 - electromagnet
- circuit A
- contacts
 - connections to the coil
 - movable core
 - coil
- pivot
 - contacts
 - coil
 - fixed core

9.



10.



Chapter 2

STUDY QUESTIONS

- Ohm's law
- volts
- R/I
- current
- directly/inversely
- volt
- $I = E/R$
- doubled
- two
- work
- watt
- IR loss
- joule
- potential
- negative/positive
- ground
- series