

Student Name: _____ Roll No: _____

1. What is the effect on a secondary cell supplying current to the load?

- A) Discharging
B) Leaking
C) Unloading
D) Charging

2. What is the name of the pair of metal strips used in battery cell?

- A) Electrodes
B) Cathode
C) Carbon rod
D) Electrolyte

3. What is the lowest voltage level of discharging the lead-acid battery?

- A) 1.7 V
B) 1.5 V
C) 1.2 V
D) 1.85 V

4. What are the uses of simulation softwares?

- A) Design a circuit
B) Solder and desolder components
C) Replace defective components
D) Design and test a circuit

5. What is the specific gravity of concentrated sulphuric acid?

- A) 1.175
B) 1.945
C) 1.835
D) 1.245

6. What is the name of the process to maintain the recommended level of electrolyte in lead-acid battery cell?

- A) Recharging
B) Cycling of the cell
C) Charging the cell
D) Topping up

7. How batteries are classified based on their working?

- A) Primary cells and secondary cells
B) Dry cells and alkaline cells
C) Cylindrical cells and rectangular cells
D) Button cells and lithium cells

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- A) Dry cells and alkaline cells
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9. Which space is used to design circuit in schematic editor of

the Tina software?

- A) File operation space
B) Circuit work space
C) Components groups space
D) Components type space

10. Which device is used to test the fully charged condition of a lead acid battery cell?

- A) Hydrometer
B) DC voltmeter
C) Multimeter
D) High rate discharge tester

11. How the circuit schematic drawn using the simulation software is tested?

- A) Using virtual oscilloscope
B) Using analysis menu
C) Using multimeter
D) Using external oscilloscope

12. Which battery is made from non-toxic materials?

- A) Lithium ion (Li-Ion)
B) Nickel metal hydride (NiMH)
C) Lithium polymer (Li-Poly)
D) Nickel cadmium (Nicad)

13. Which energy is converted by the battery to produce electricity?

- A) Chemical energy into electrical energy
B) Electrical energy into light energy
C) Mechanical energy into electrical energy
D) Electrical energy into mechanical energy

14. Which battery is used for cellular phones?

- A) Nickel ion
B) Lithium ion
C) Sodium sulphur
D) Zinc chloride

15. Which is the additional percentage of power delivered by the lithium Ion compared to NiMH battery?

- A) 25%
B) 0.15
C) 60%
D) 40%

16. How the performance of the amplifier designed using the simulation software is tested?

- A) Using test and measuring equipments
B) Using measuring equipments
C) Using virtual instrumentation testing
D) Using multimeter

17. What is the range of current rating of lead acid batteries used in automobiles?

- A) 2.5 to 4.5 Amp
 - B) 100 to 400 Amp
 - C) 10 to 25 Amp
 - D) 5 to 10 Amp
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18. What is the unit of electric charge?

- A) Ampere
 - B) Volts
 - C) Hertz
 - D) Coulomb
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19. What is the electrolyte level maintained above the top of the plates in lead acid battery cells?

- A) 5 mm to 8 mm
 - B) 2 mm to 4 mm
 - C) 16 mm to 25 mm
 - D) 10 mm to 15 mm
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20. Which electrolyte is used in lead-acid battery?

- A) Zinc chloride
 - B) Alkaline solution
 - C) Sulphuric acid
 - D) Potassium hydroxide solution
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