

Duration: 60 Mins**Total Marks: 20****Q.ID: ITISKILL5950WB**

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

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

Answer: B) Using virtual instrumentation testing

2. How batteries are classified based on their working?

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

Answer: A) Primary cells and secondary cells

3. Which electrolyte is used in lead-acid battery?

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

Answer: D) Sulphuric acid

4. What are the uses of simulation softwares?

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

Answer: B) Design and test a circuit

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

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

Answer: C) 1.7 V

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

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

Answer: B) Electrodes

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

- A) 10 to 25 Amp
 B) 5 to 10 Amp
 C) 2.5 to 4.5 Amp
 D) 100 to 400 Amp

Answer: D) 100 to 400 Amp

8. Which device is used to test the fully charged condition of

a lead acid battery cell?

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

Answer: C) High rate discharge tester

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

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

Answer: D) 1.835

10. How batteries are classified?

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

Answer: C) Primary cells and secondary cells

11. What is the electrolyte level maintained above the top of the plates in lead acid battery cells?

- A) 16 mm to 25 mm
 B) 5 mm to 8 mm
 C) 10 mm to 15 mm
 D) 2 mm to 4 mm

Answer: C) 10 mm to 15 mm

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

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

Answer: A) 40%

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

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

Answer: A) Topping up

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

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

Answer: A) Using analysis menu

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

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

Answer: D) Discharging

16. Which battery is used for cellular phones?

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

Answer: A) Lithium ion

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

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

Answer: D) Nickel metal hydride (NiMH)

18. What is the unit of electric charge?

- A) Hertz
- B) Ampere
- C) Coulomb
- D) Volts

Answer: C) Coulomb

19. Which space is used to design circuit in schematic editor of the Tina software?

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

Answer: A) Circuit work space

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

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

Answer: A) Chemical energy into electrical energy
