Monthly Test

March 2026

Electronic mechanic

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Q. ID: ITISKILL5950WB

Answer Key

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

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

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

Answer: D) Using analysis menu

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

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

Answer: C) Electrodes

3. What is the unit of electric charge?

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

Answer: C) Coulomb

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

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

Answer: A) High rate discharge tester

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

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

Answer: D) Circuit work space

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

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

Answer: A) 100 to 400 Amp

7. 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 measuring equipments
D) Using multimeter

Answer: B) Using virtual instrumentation testing

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

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

Answer: D) Topping up

9. How batteries are classified based on their working?

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

Answer: C) Primary cells and secondary cells

10. How batteries are classified?

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

Answer: B) Primary cells and secondary cells

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

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

Answer: D) 1.7 V

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

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

Answer: B) Chemical energy into electrical energy

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

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

Answer: A) Sulphuric acid

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

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

Answer: C) Discharging

15. Which battery is used for cellular phones?

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

Answer: A) Lithium ion

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

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

Answer: B) 1.835

17. What are the uses of simulation softwares?

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

Answer: B) Design and test a circuit

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

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

Answer: C) 40%

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

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

Answer: B) 10 mm to 15 mm

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

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

Answer: A) Nickel metal hydride (NiMH)