ITI Quiz - 05-Feb-2026 03:11 PM

Q. ID: ITISKILL23045H

January 2026 | **EM** | Question Paper

Duration: 60 Mins | **Total Marks: 27** | **ID: ITISKILL23045H**

Student Name: _____ Roll No: _____

1. Which battery is used for cellular phones?

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

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

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

3. What is the total voltage of six 1.5 V cells, connected in series?

A) 9 VDC
B) 3 VDC
C) 12 VDC
D) 6 VDC

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

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

5. How batteries are classified?

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

6. Which method is adopted to charge a car battery with voltage rating of 2.3 V per cell?

A) Constant current charging method
B) Constant voltage charging method
C) Float charging method
D) Trickle charging method

7. What is the rated output voltage of a silver oxide cell?

A) 1.0 VDC
B) 4.0 VDC
C) 1.5 VDC
D) 2.5 VDC

8. Which material is used for negative terminal of alkaline manganese dioxide batteries?

A) Lithium
B) Zinc
C) Cadmium
D) Nickel hydroxide

9. 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

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

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

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

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

12. Why the load testing is done on the lead-acid battery?

A) Test I2R power loss in the battery cell
B) Measure the rated output voltage
C) Test the dimensional accuracy
D) Verify the rated power delivery

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

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

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

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

15. Which rechargeable cell is designed with conductive polymer?

A) Lead acid cell
B) Gelled electrolyte lead acid cell
C) Plastic cell
D) Nickel metal hydride cell

16. 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) 2 mm to 4 mm
D) 10 mm to 15 mm

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

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

18. How batteries are classified based on their working?

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

19. What is the use of battery analyzers with rapid-test program?

A) Indicate the health condition of battery
B) Test the battery life
C) Test the charging current of battery
D) Test the load current delivered

20. What is the rated voltage of a single cell in lead acid battery?

A) 12 V
B) 2.2 V
C) 1.5 V
D) 2.0 V

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

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

22. What is the percentage of sulphuric acid in electrolyte used for lead-acid batteries?

A) 27%
B) 40%
C) 25%
D) 12%

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

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

24. What is the colour of positive electrode in fully charged lead acid battery?

A) Red colour
B) Spongy grey colour
C) Grey colour
D) Reddish brown

25. What is the unit of electric charge?

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

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

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

27. Which electrolyte is used in maintenance free lead acid batteries?

A) Potassium electrolyte
B) Ceramic electrolyte
C) Gelled electrolyte
D) Sodium electrolyte