

Duration: 30 Mins**Total Marks: 27****Q.ID: ITISKILL2919YP****1. How batteries are classified based on their working?**

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

Answer: C) Primary cells and secondary cells**2. Which electrolyte is used in maintenance free lead acid batteries?**

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

Answer: B) Gelled electrolyte**3. What is the name of the process to maintain the recommended level of electrolyte in lead-acid battery cell?**

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

Answer: D) Topping up**4. 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

Answer: B) 100 to 400 Amp**5. Which electrolyte is used in lead-acid battery?**

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

Answer: C) Sulphuric acid**6. What is the rated voltage of a single cell in lead acid battery?**

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

Answer: A) 2.2 V**7. 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**8. What is the unit of electric charge?**

- A) Volts B) Hertz

C) Ampere

D) Coulomb

Answer: D) Coulomb**9. Why the load testing is done on the lead-acid battery?**

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

Answer: D) Measure the rated output voltage**10. Which is the additional percentage of power delivered by the lithium ion compared to NiMH battery?**

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

Answer: A) 40%**11. Which method is adopted to charge a car battery with voltage rating of 2.3 V per cell?**

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

Answer: A) Constant voltage charging method**12. What is the specific gravity of concentrated sulphuric acid?**

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

Answer: C) 1.835**13. What is the total voltage of six 1.5 V cells, connected in series?**

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

Answer: A) 9 VDC**14. How batteries are classified?**

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

Answer: A) Primary cells and secondary cells**15. 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

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

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

Answer: A) High rate discharge tester

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

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

Answer: B) Reddish brown

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

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

Answer: C) Indicate the health condition of battery

19. Which battery is used for cellular phones?

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

Answer: A) Lithium ion

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

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

Answer: C) 1.5 VDC

21. Which rechargeable cell is designed with conductive polymer?

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

Answer: D) Plastic cell

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

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

Answer: B) 27%

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

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

Answer: D) Discharging

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

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

Answer: A) Nickel metal hydride (NiMH)

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

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

Answer: D) Zinc

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

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

Answer: A) Chemical energy into electrical energy

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

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

Answer: C) Electrodes