

Engineering Chemistry

WorkSheet-3: Energy Sources

Choose the correct Answer:

1. The anode of the Zinc-air battery is ()
 - a. Zinc
 - b. Carbon plate
 - c. Lithium cobalt oxide
 - d. None of the these
2. The batteries that are rechargeable are called ()
 - a. Primary
 - b. Secondary
 - c. Reserve battery
 - d. Fuel cells
3. The secondary battery is also called ()
 - a. Storage
 - b. Non rechargeable
 - c. Non reversible
 - d. All the above
4. Energy can be withdrawn indefinitely as long as outside supply of fuel is maintained ()
 - a. Primary battery
 - b. Secondary battery
 - c. Fuel cell
 - d. Reserve battery
5. The Catalyst used in Moving bed Catalytic Cracking behaves ()
 - a. As a gas
 - b. As a suspension
 - c. As a fluid
 - d. As plasma
6. Which of the following is used as a jet engine fuel ()
 - a. LPG
 - b. Power alcohol
 - c. Kerosene
 - d. Coal
7. Which of the following fuel gases posses highest calorific value ()
 - a. Water gas
 - b. Producer gas
 - c. Natural gas
 - d. Bio gas
8. The calorific value of a fuel depends on the percentage of ()
 - a. Volatile matter
 - b. Ash
 - c. Fixed carbon
 - d. moisture

9. Fischer Tropsch process synthesis petrol from ()
- Coal
 - Hydrogen
 - Water gas
 - Biogas
10. LPG is ()
- Liquid petroleum gas
 - Light petroleum gas
 - Liquid plasma gas
 - None

Fill in the Blanks

- The cathode used in Zn-air battery is _____
- Reserve battery is also called as _____
- The batteries used in the mobile are _____
- The EMF of the Zn-air battery is _____
- The Cathode in Li ion Battery _____
- Dulong's Formula is _____
- The Combustible substance which on proper burning in air or Oxygen gives large amount of heat is called _____
- The process of Converting Higher boiling point fractions to lower boiling point fractions is called _____
- The process of Separation of various fractions of petroleum based on their boiling points is known as _____
- CNG is _____

True/False

- | | |
|--|-------------|
| 21. The Electrolyte used in Zn -Air Battery is KOH | True /False |
| 22. The Anode in Li Ion Battery is Carbon Plate | True /False |
| 23. PEM is the membrane used in DMFC | True /False |
| 24. The Composition of Hythane is a Blend of Natural gas and Hydrogen | True /False |
| 25. Green Hydrogen is produced by splitting water molecule in to Hydrogen and Oxygen by electrolysis | True /False |

Match the Following

- | | |
|------------------------|------------------------------|
| 26. Primary battery | a) DMFC |
| 27. Secondary battery | b) Watches |
| 28. Fuel cell | c) Li-ion battery |
| 29. Green Hydrogen | d) Moving bed |
| 30. Catalytic cracking | e) Chemicals and Fertilisers |