

## UNIT-3

## **ENERGY SOURCES**

## **Short answer questions:**

- 1. Define Battery.
- 2. What is Reserve Battery.
- 3. What are Fuel cells.
- 4. Write any two difference between Primary Battery and Secondary Battery.
- 5. What are the Commercial Requirements of a Battery.
- 6. Write any two applications of LPG.
- 7. What any two characteristics of a good fuel.
- 8. Define cracking.
- 9. What is calorific value of a fuel.
- 10. Write the Dulong's Formula.

## **Long Answer Questions:**

- 1. Write the Construction, working and applications of Li-ion cells.
- 2. Explain the Construction, working and applications of Zn-air Batteries.
- 3. Explain the Construction, working and applications of Direct Methanol Fuel cell.
- 4. Differentiate Fuel cells and Batteries.
- 5. What is cracking? Explain the Moving Bed Catalytic Cracking.
- 6. Explain the process of Refining of Crude oil.
- 7. What is Gaseous fuel. Write the Composition and Applications of CNG.
- 8. Explain how Synthetic fuel is prepared from Fischer Tropsch process.
- 9. Write the Applications of Hythane and Green hydrogen.
- 10. Calculate Net and Gross calorific value of Coal having the following composition Carbon-85%, Nitrogen-2%, Hydrogen-8%, Sulphur-1%, Ash-4% Latent steam of heat is 587 cal/g