

(Time: - 01 Hour)

Instructions to the students:

- i) All questions are compulsory. ii) Neat diagrams must be drawn wherever necessary.
 iii) Figures to the right indicate full marks. iv) Use of scientific calculator is allowed
 v) Assume suitable data, if necessary.

| Q No. | Question | CO | Mark | BL |
|--|--|-----|------|----|
| 1 | a) Explain the term battery. Differentiate between a primary & secondary battery | CO3 | [5] | L2 |
| | OR | | | |
| | b) Draw neat & labelled diagram of H ₂ -O ₂ fuel cell, along with construction, working & reactions involved. | CO3 | [5] | L2 |
| | c) Describe the construction & working of Lithium ion battery along with diagram & reactions involved. | CO3 | [05] | L2 |
| 2 | OR | | | |
| | d) Explain the construction & working of Laclanche-Dry cell battery along with diagram & reactions involved. | CO3 | [5] | L2 |
| | a) Explain any two sources of air pollution. Explain cyclone Collector Method with a neat diagram. Mention the two effects of air pollution on humans. | CO4 | [5] | L2 |
| | OR | | | |
| b) Explain the term AQI. Describe AQI scale from 0-500 and mention any four air pollutants. | CO4 | [5] | L2 | |
| c) Explain the term water pollution and discuss about its three sources with suitable examples and their effect on humans. | CO4 | [5] | L2 | |
| OR | | | | |
| d) Explain the term WQI. Discuss two sources of water pollution and its effects on humans and the environment. Suggest any two methods to control water pollution. | CO4 | [5] | L2 | |

- BL - Bloom's Taxonomy Levels (1- Remember, 2- Understand, 3 - Apply, 4 - Analyze, 5 - Evaluate, 6 - Create)
- CO- Course Outcomes