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BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)
B. Tech. Sem - II ELECTRICAL : WINTER- 2022
SUBJECT : ELECTRO-CHEMISTRY

Day : Friday

Time : 10:00 AM-01:00 PM

Date : 25-11-2022

W-24078-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Use of non-programmable calculator is **allowed**.
- 4) Assume suitable data **WHEREVER** necessary.
- 5) Draw neat diagram **WHEREVER** necessary.

- Q.1 a) Discuss about construction and working of discharging process related to Alkaline Storage battery with neat labeled diagram. Give applications of Alkaline Storage battery. (10)
- OR
- Q.1 a) Discuss about construction and working of discharging process related to Lithium ion battery and Dry cell with neat labeled diagram. (10)
- Q.2 a) Write note on : (10)
- i) Storage and Difficulties of Hydrogen
 - ii) Advantages and limitations of Fuel Cell
- OR
- Q.2 a) Define Fuel Cell. Give its types with examples. (04)
- b) Discuss about construction and working of discharging process related to Phosphoric Acid Fuel Cell with neat labeled diagram. (06)
- Q.3 a) Explain Plasma spraying synthesis and Sol-Gel Process. (10)
- OR
- Q.3 a) Discuss about Nano-science and Nanotechnology with its approaches. (10)
- Q.4 a) Discuss briefly safety and fire protection with examples. (10)
- OR
- Q.4 a) Define Chemical process industries. (10)
- Explain classification of chemical industries on the basis of materials used or produced.
- Q.5 a) Write note on Special paints and Enamels. (05)
- b) Explain Cementation with its types. (05)
- OR
- Q.5 a) Explain Electroplating and Electro-less plating with neat labeled diagram. (10)
- Q.6 a) Discuss synthesis methods by using Green pathway for Adipic acid. (05)
- b) Write note on Goals of Green Chemistry. (05)
- OR
- Q.6 a) Write note on Advantages and disadvantages of Green Chemistry. (05)
- b) Discuss synthesis methods by using Green pathway for Indigo Dye. (05)
