

BACHELOR OF TECHNOLOGY (CBCS - 2023)
B. Tech. Sem-I INFORMATION TECHNOLOGY : SUMMER : 2024
SUBJECT: ENGINEERING CHEMISTRY

Day : Thursday
Date : 09/05/2024

S-27657-2024

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Draw neat diagrams **WHEREVER** necessary.

- Q.1 Describe Hardness of water with its types. (10)
Write note on Ion exchange process. **OR**
- Q.1 Describe Green pathway for the synthesis of Adipic acid. (10)
Give four applications of Green Chemistry.
- Q.2 Write note on Knocking and Octane number. (10)
OR
- Q.2 Write note on Catalytic cracking. (10)
- Q.3 Write note on Oxidation Corrosion. (10)
OR
- Q.3 Describe Anodic protection with a neat labeled diagram with a graph. (10)
- Q.4 Write note on Polymer and Polymerization. (10)
OR
- Q.4 Describe synthesis of Polyaniline polymers with properties and applications. (10)
- Q.5 Describe structure, properties and applications of Graphenes with neat labeled diagram. (10)
OR
- Q.5 Explain types of approaches for the synthesis of nanomaterials. (10)
Give four Optical and Catalytic properties of nanomaterials.
- Q.6 Explain the working and application of pH Meter and glass electrode with the necessary diagrams. (10)
OR
- Q.6 Explain the working and application of Conducto-meter and Conductivity cell with the necessary diagrams. (10)

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