

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech I Year II Semester Supplementary Examinations May/June-2024

ENGINEERING CHEMISTRY
(Common to CE, ME & AGE)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 Explain with a neat sketch the various steps involved in municipal solid waste water treatment. CO1 L5 12M

OR

- 2 Define boiler troubles and what are the various troubles caused to the boiler due to boiler feed water and explain various methods involved in their treatment. CO1 L2 12M

UNIT-II

- 3 a Define electroplating ? Explain electroplating of Nickel and copper ? CO2 L1 6M
b What is Electrochemical cell ? Give an example. CO2 L1 6M

OR

- 4 What are the various types of corrosion? Discuss in detail about electrochemical or wet corrosion? CO2 L6 12M

UNIT-III

- 5 a Describe the preparation, properties and uses of Bakelite and PVC CO3 L6 6M
b Explain the mechanism involved in Free radical addition polymerization. CO3 L2 6M

OR

- 6 What is the importance of analysis of Coal? Explain in detail about the Proximate and Ultimate analysis of coal with Significance. CO3 L2 12M

UNIT-IV

- 7 a Define Composites? How is composites prepared? CO4 L1 6M
b Write a note on Fiber reinforced composite materials. CO4 L1 6M

OR

- 8 a Define lubricants and write its characteristics. CO4 L1 4M
b Describe in detail about the classification of lubricants with examples. CO4 L1 8M

UNIT-V

- 9 Explain principle, instrumentation and applications of Scanning Electron microscopy (SEM). CO5 L5 12M

OR

- 10 a Explain the BET Equation. CO5 L2 6M
b What are the factors influencing Adsorption of gases on solids? CO5 L1 6M

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