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

B.Tech I Year II Semester Supplementary Examinations May-2022

ENGINEERING CHEMISTRY

(Common to CE & AGE)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 How do you estimate dissolved oxygen in water is determined by Winkler's method? L4 12M

OR

- 2 a What are the specifications of the drinking water BIS and WHO Standards? L1 6M
b Explain about demineralization of brackish water by Electrodialysis. L2 6M

UNIT-II

- 3 Explain various factors influencing the rate of corrosion. L3 12M

OR

- 4 a What is Electrochemical cell? Give an example. L1 4M
b Define Electrode Potential. Derive the Nernst equation for a single electrode potential and write its applications. L1 8M

UNIT-III

- 5 a Distinguish between Thermoplastics and thermosetting plastics. L4 4M
b Explain the mechanism of addition polymerization. L2 8M

OR

- 6 Describe the method employed for the refining of petroleum with neat sketch. L3 12M

UNIT-IV

- 7 Discuss the mechanism of different types of lubrication. L3 12M

OR

- 8 a Write a note on Fiber reinforced materials. L1 6M
b What are the properties of composite material L1 6M

UNIT-V

- 9 a Write an account on carbon nano tubes. L1 6M
b Write a note on fullerenes. L1 6M

OR

- 10 Discuss the principle, instrumentation and applications of Transmission electron microscopy (TEM). L3 12M

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