AM/CS/CYS/DS 122 (R-22)

Total No. of Questions : 10] [Total No.of Pages : 02

I/IV B. Tech. DEGREE EXAMINATIONS, AUGUST - 2023

Second Semester

AM / CS / CYS / DS

ENGINEERING CHEMISTRY

Time : **Three Hours** Maximum : **70** Marks

Answer All Questions

Answer ONE question from each Unit. 5x14=70 M

UNIT - I

1. What is water treatment and discuss about the various methods of water treatment for drinking purpose.

(OR)

2. Explain the softening of water by ion-exchange process and its advantages ?

UNIT - II

3. Explain the following :

   a) Stereospecific polymerization.

   b) Carbon nanotubes.

(OR)

4. Write the preparation, properties and applications of phenol-formaldehyde resin.

UNIT - III

5. Write a short note on the following :

   a) Dry cell.

   b) Lead-acid cell.

   c) Fuel cell.

(OR)

6. Explain the factors affecting corrosion and corrosion control methods.

P.T.O.

UNIT - IV

7. Write the principle and applications of NMR spectroscopy.

(OR)

8. Describe the characteristic features of HPLC and its applications.

UNIT - V

9. Write a note on the setting and hardening of cement.

(OR)

10. Outline the synthesis of aspirin and paracetamol.