Reg. No. : ☐☐☐☐☐☐☐☐☐☐

Question Paper Code: 41004

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

First Semester

14UCY104 – ENGINEERING CHEMISTRY

(Common to Civil and Mechanical Branches)

(Regulation 2014)

Duration: 1:45 hour   Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. Differentiate between homo-polymer and copolymer.

2. What are refractories? How are they classified?

3. Mention the advantages of electroless plating over electroplating.

4. What is Freundlich's adsorption isotherm?

5. What are chromopores?

6. List out any two important objectives of electro plating.

7. Define desorption.

8. Give an example of auto catalysis reaction.

9. State Beer-Lamberts law.

10. What are the types of electronic transitions?

11. What is meant by functionality of a monomer?

12. What is meant by vulcanization of rubber?

13. What is meant by refractoriness under load?

14. What are nano materials?

15. State Pilling Bed Worth rule.

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

16. Discuss the preparation, properties and uses of polyethylene. Differentiate between low density polyethylene and high density polyethylene. . (10)

17. Describe the process of setting and hardening of cement. (10)

18. Explain the environment based factors which influence the rate of corrosion. (10)

19. Stating the assumptions based on which it is derived, derive the Langmuir adsorption isotherm. Interpret the results at low pressure and high pressure. Mention its demerits. (10)

20. Derive the Beer - lambert's law. Write its limitations. (10)

41004