Reg. No. : | | | | | | | | | | |

Question Paper Code: 31004

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

First Semester

Civil Engineering

01UCY104 - ENGINEERING CHEMISTRY

(Common Mechanical Engineering)

(Regulation 2013)

Duration: 1:45 hour Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. What is meant by vulcanization of rubber?
2. Define composite materials.
3. What are nanomaterials?
4. Define flash point.
5. What is electroless plating?
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. Differentiate thermoplastic from thermosetting plastic with an example. (10)

17. Discuss briefly on any four important properties of refractory materials. (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. Discuss with a neat diagram, the principle, instrumentation, working and applications of XRD. (10)