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Question Paper Code:91006

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

First Semester

Civil Engineering

19UCY106 - CHEMISTRY FOR CIVIL ENGINEERING

(Regulation 2019)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. Differentiate scale and sludge. CO1 Ann
2. Write the reactions involved in the zeolite process CO1 R
3. Analyze the type of corrosion occurs in wire fence. CO3 Ann
4. Define Beer-Lamberts law CO2 R
5. Write the composition of portland cement. CO4 R
6. What is calgon conditioning? CO1 U
7. Bring out the differences between dry and wet corrosion CO1 R
8. State Beer-Lambert's law. CO3 R
9. Mention any four uses of feldspar. CO4 U
10. List out the composition of cement. CO4 R
11. Compare carbonate and non carbonate hardness of water. CO1- Ana
12. Analyze the function of bleaching powder as a germicide. CO1- R
13. Recall Electro plating. CO2- Ana
14. List out the applications of UV-Visible spectrophotometer CO3- R
15. Classify refractories based on its chemical properties CO4- R

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

16. Describe the internal conditioning of water. Explain the different types with the reaction involved in it. CO1- U (10)
17. What are ion exchange resins? Discuss their applications in water-softening. How spent resins are regenerated? CO1- U (10)
18. What are paints? Explain its constituents with its functions. CO2- U (10)
19. Explain the principle and working of UV-Visible spectroscopy and discuss any four applications. CO3- U (10)
20. Explain the process involved in the manufacturing of magnesite and zirconia brick CO4- U (10)