

11-5-19

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[F.T]

B.E / B.Tech/B.Arch END SEMESTER EXAMINATIONS, APR / MAY 2019
PRINTING TECHNOLOGY
II Semester
CY 8203 CHEMISTRY FOR PRINTING TECHNOLOGY
(Regulation 2012)

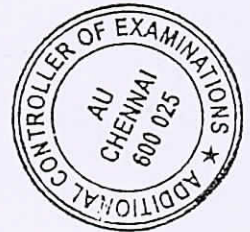
Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. What is the significance of COD and BOD as a water quality parameter?
2. List any four constituent of paints with its function.
3. What makes graphite and molybdenum sulphide a solid lubricant?
4. How does an adhesive action take place?
5. What are the uses of polypropylene as a commodity?
6. What are fiber reinforced plastics? Give two examples.
7. What is meant by a green compact in powder metallurgy?
8. Give two examples each of ferrous and non ferrous alloys with its use.
9. What is population explosion?
10. Write Bragg's equation with all the terms defined.



Part - B (5 x 16 = 80 marks)
(Question No.11 is Compulsory)

11. (i) With neat diagram, elaborate on zeolite and ion exchange demineralization process for removing hardness of water. 8 marks
(ii) Explain the different types of corrosion and its control measures. 8 marks
12. a) Describe any four important properties of lubricants for an effective lubrication. 16 marks

OR

b) Elaborate on the physical and chemical factors influencing adhesive action. Also explain the bonding process of adhesives with examples. 16 marks
13. a) Describe the preparation, properties and uses of speciality polymers polyether ether ketone, and Polyether sulfone. 16marks

OR

b) Elaborate on the classification and applications of composite materials. 16 marks

14. a) Why is heat treatment done for alloys? Explain the different heat treatment methods employed for steel. 16marks

OR

b) What is powder metallurgy? Explain all the steps involved in the making of porous metal filters. 16marks

15. a) Discuss the principle, instrumentation (block diagram) and applications of Atomic Force Microscopy (AFM). 16marks

OR

b) Discuss the principle, instrumentation (block diagram) and applications of Differential Scanning Calorimetry (DSC) and Thermo-gravimetric analysis (TGA). 16marks

