



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – APRIL 2017

CH 6611- INDUSTRIAL CHEMISTRY

Date: 18-04-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART -A

Answer ALL the questions

(10 x 2 =20)

1. Define octane number.
2. Mention any two examples of renewable and non-renewable energy sources.
3. What is NPK?
4. Draw the structure of BHC.
5. Define temporary hardness of water.
6. Name any two greenhouse gases.
7. Define BOD.
8. How does ozone depletion occur?
9. Distinguish between lubricants and greases.
10. What are the main constituents of cement?

PART –B

Answer any EIGHT questions

(8 x 5 = 40)

11. What are the requisites of a good fuel?
12. Discuss the production, composition and uses of gobar gas
13. What are bio pesticides? How is it advantageous over chemical pesticides?
14. Discuss the manufacture of 2,4-D and 2,4,5-T.
15. How is sugar recovered from molasses?
16. Explain the principle involved in reverse osmosis.
17. Mention the various standards used for measuring the quality of water?
18. Outline the procedure involved in the estimation of hardness of water using EDTA method.
19. Mention the ill effects of cyanide and mercury poisoning.
20. Explain the causes and consequences of photochemical smog.
21. Explain the setting of cement with equation.
22. Write short notes on ISI specification.

PART – C

Answer any FOUR questions

(4 x 10=40)

23. Explain the production and uses of tetraethyl lead, ETBE and MTBE.
24. Discuss the role of biofertilizers and plant growth hormones in plant growth.
25. Explain in detail the various stages involved in the primary and secondary treatment of waste water.
26. Discuss the causes and consequences of i) Acid rain ii) Global warming iii) COD.
27. How is crude oil refined? Give the significance of the different fractions obtained from petroleum.
28. a) What is superphosphate of lime? Discuss its preparation.
b) Discuss the importance of the following materials
 - i) Special paints
 - ii) Dyes
 - iii) glass
 - iv) Perfumes
 - v) Flavours. **(5+5)**
