

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – NOVEMBER 2015

CH 6617 - INDUSTRIAL CHEMISTRY

Date : 25/09/2015

Dept. No.

Max. : 100 Marks

Time : 09:00-12:00

PART -A

Answer ALL the questions

(10 x 2 =20 marks)

1. Define calorific value of fuel.
2. What is anthracite?
3. Give any two examples of renewable energy sources.
4. What is NPK?
5. Define the term COD.
6. Draw the structure of BHC.
7. What is Portland cement?
8. Distinguish between temporary and permanent hardness of water.
9. What are Zeolites? How are they useful in water treatment?
10. List any two chemicals responsible for Global warming.

PART -B

Answer any EIGHT questions

(8 x 5 = 40 marks)

11. What are biopesticides? How is it advantageous over the chemical pesticides?
12. Discuss the characteristics of a good fuel.
13. Explain the composition and uses of a) Natural gas b) Gobar gas
14. What is superphosphate of lime? Discuss its preparation.
15. How are pesticides classified? Give an example each.
16. What are sugar substitutes? List the sugar substitutes available in the market
17. Explain the principle involved in desalination of water.
18. What are fossil fuels? How do they pollute environment?
19. What is patenting?
20. What are special paints? Discuss the manufacture of special paints.
21. Explain the causes and consequences of acid rain.
22. Explain the biochemical effect of Lead, Mercury and carbon monoxide pollution.

PART - C

Answer any FOUR questions

(4 x 10=40 marks)

23. Explain the different types of coal, their properties and uses.
24. Discuss the role of micronutrients in plant growth.
25. Explain the manufacture and uses of i) Urea ii) Kerosene gas.
26. a) How is hardness of water determined by EDTA method?
b) Write briefly on i) Biological oxygen demand ii) total organic carbon.
27. Discuss the importance of the following materials a) Lubricants and greases b) Rubber
c) Glass d) Perfumes.
28. a) Highlight the international standards for potable water.
b) What are the effects of a) Green house effect b) ozone depletion?
