



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – CHEMISTRY**

**SIXTH SEMESTER – APRIL 2015**

**CH 6611/CH 6605 - INDUSTRIAL CHEMISTRY**

Date : 21/04/2015  
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

**PART-A**

Answer **ALL** Questions:

(10x2=20 marks)

1. Define the term calorific value.
2. What do you mean by cracking of oil?
3. What are NPK fertilizers?
4. What is gammaxane? Give its structure.
5. What are the problems associated with hard water?
6. What is reverse osmosis?
7. Define the term 'BOD'.
8. Give any two examples for green house gases.
9. What are antiknocking agents?
10. What is TNT? Give its uses.

**PART-B**

Answer any **EIGHT** Questions:

(8x5=40 marks)

11. What is hydrodesulphurization? How is it carried out?
12. How is tetraethyl lead produced? Mention its uses.
13. What are 'mixed fertilizers'? Mention their uses.
14. How is saccharin synthesized? Give its uses.
15. What are zeolites? How are they used for purification of water?
16. Write a note on ion- exchange process in the treatment of polluted water.
17. What are faecal coliforms? How are they removed from the contaminated water?
18. What is ozone layer depletion? Explain its causes and ill effects.
19. Write a short note on 'Minameta disease'.
20. Write a short note on 'cyanide pollution'.
21. How is pulp manufactured by chemical process?
22. What are special paints? How are they manufactured?

**PART-C**

Answer any **FOUR** Questions:

(4x10=40 marks)

23. Explain the different types of coals, their properties and uses.
24. Explain the production, composition and uses of the following:
  - a) Natural gas
  - b) Gobar gas.
25. a) What are pesticides? Explain their classification with examples.
  - b) Explain the manufacture and uses of DDT.
26. a) How is ethanol prepared by fermentation process?
  - b) Write a note on petrochemicals.
27. Write a note on waste water treatment.
28. Write short notes on the following:
  - a) Acid rain
  - b) Lead pollution.

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