



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – APRIL 2015

CH 6617 - INDUSTRIAL CHEMISTRY

Date : 22/04/2015
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

PART - A

Answer ALL questions:

(10 x 2 = 20 Marks)

1. What are the requisites of a good fuel?
2. Mention any Four Fuel gases?
3. Mention any two Nitrogenous fertilizers with their formula.
4. What are the methods employed for pest control.
5. Abbreviate BOD and COD
6. Distinguish Temporary Hardness from Permanent Hardness?
7. What is acid rain?
8. What is the cause of Photochemical Smog?
9. Mention the composition of Portland cement?
10. What is plaster of paris? Give its formula.

PART-B

Answer any EIGHT questions:

(8 x 5 = 40 Marks)

11. What is Coke? Explain the role of Coke as an efficient solid fuel. (2+3)
12. Match the following:

a) Insecticide	-	i) Destroy harmful micro organisms
b) Herbicide	-	ii) Fumigants
c) Disinfectants	-	iii) Kills weeds
d) Defoliants	-	iv) Controls insects
e) Rodenticide	-	v) Removal of leaves decaying in soil
13. Explain the following a) gobar gas b) Natural gas. (3+2)
14. Mention the uses of a) Urea b) Super Phosphate of lime. (3+2)
15. Mention the steps involved in the manufacture of Ethanol from Molasses.
16. How is water quality ascertained? Mention the various standards used for measuring the quality of water.
17. What are the various methods adopted for destroying bacteria in water.
18. Draw the structure of EDTA and outline the principle involved in the estimation of hardness of water using EDTA.
19. Mention the ill effects of Lead and mercury poisoning.

20. Explain the following terms a) SPM b) RSPM c) (NO)_x.

21. What is meant by Setting of Cement?

22. Write a note on different kinds of pollution.

PART-C

Answer any FOUR questions:

(4 x 10 = 40 Marks)

23. a) What is the origin of Petroleum. (4)

b) Explain the following: i) Cracking ii) Octane Rating. (6)

24. a) Draw the structures of the following i) DDT ii) BHC iii) 2,4-D. (6)

b) Explain the following: i) Aspartame ii) Rectified Spirit. (4)

25. a) Write a note on: i) Direct Fertilizers ii) Stimulant Fertilizers
iii) Mixed Fertilizers. (6)

b) Mention the disadvantages of Hard water. (4)

26. Explain the softening of water by i) Permutit Process ii) Ion Exchange Resin method . (5+5)

27. Mention the sources of Air and water pollution.

28. Write an essay on classification of fertilizers and also explain advantages and disadvantages of each type.

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