

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – APRIL 2018

CH 6617– INDUSTRIAL CHEMISTRY

Date: 23-04-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART- A

Answer **ALL** questions

10X2 = 20

1. Define calorific value of fuel.
2. State octane number.
3. What are plant growth hormones?
4. What is Bordeaux mixture? Mention its use.
5. What do you mean by reverse osmosis?
6. 'Temporary hardness can be removed by boiling but not permanent hardness.' Justify.
7. Differentiate BOD and COD.
8. What is green house effect?
9. What is plaster of paris? Mention its use.
10. What are abrasives?

PART- B

Answer any **EIGHT** questions

8x5 = 40 marks

11. What are coking and non-coking coals? Explain.
12. Write notes on Gobar electric cell.
13. What is Saccharin? How will you prepare it? Mention its use.
14. What are micronutrients? Discuss their role in plant growth.
15. Discuss the manufacture of 2, 4- D and 2, 4, 5-T.
16. How will you soften hard water by zeolite process ?
17. What happens when hard water is used in steam generation boilers? Explain.
18. List out the effects of iron and manganese in water.
19. Discuss the effects of ozone layer depletion.
20. Explain the purpose and procedure of Patent.
21. Write notes on explosives.
22. Differentiate lubricants and greases .

PART- C

Answer any **FOUR** questions

4x10 = 40 marks

23. Give a brief account on cracking of petroleum.

24. (i). Describe the manufacture of ethanol from molasses

6 marks

(ii). Write notes on bio-pesticides.

4 marks

25. Give a detailed account on the estimation of hardness of water by EDTA method.

26. (i). Explain break point chlorination.

4 marks

(ii). Write notes on contact insecticides and fumigants

6 marks

27. Discuss the biochemical effects of the following pollutants

(i). Mercury (ii). Cyanide (iii). CO (iv). SO₂

28. (i). What are petrochemicals? Mention their uses.

(ii). Write notes on setting of cement.
