

DEGREE EXAMINATION, APRIL 2020
III Year VI Semester
Industrial Chemistry

Time : 3 Hours

Max.marks :75

Section A ($10 \times 2 = 20$) Marks

Answer any **TEN** questions

1. Classify the following as primary or secondary fuel.
i) Gasoline ii) Diesel iii) Producer gas iv) Charcoal
2. Mention any four gaseous fuels
3. Distinguish Chromophore and Auxochrome.
4. Mention any two vat dyes.
5. What are the components of TDS in water?
6. What is the need for Ozone Treatment?
7. Define rancidity.
8. What is saponification?
9. Give an example of alumina thermic process.
10. Write the chemical formula of magnesite and dolomite.
11. What is Cetane Number?
12. Draw the structure of phenolphthalein.

Section B ($5 \times 5 = 25$) Marks

Answer any **FIVE** questions

13. What are the properties of a soap and how do they differ from detergents?
14. What are fuel cells? Explain the working of molten carbonate fuel cell and mention its advantages.
15. What are Surfactants? Give an example of cationic, anionic and neutral surfactant.
16. Mention the preparation and properties of Malachite green.
17. Discuss the analysis of water for BOD and TDS.
18. Explain how potassium permanganate is industrially prepared?
19. Write a note on the composition of fats and oils.

Section C ($3 \times 10 = 30$) MarksAnswer any **THREE** questions

20. Write a note on the cleansing action of soaps and detergents
21. Explain in brief the classification of dyes.
22. What are the various sources of water pollution and mention the methods of treatment of waste water.
23. a) Mention the components obtained in the distillation of crude oil
b) How are semi water gas and producer gas prepared? (6+4)
24. Outline the steps involved in the manufacture of aluminium from its ore with reactions. Mention the uses of aluminium

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