25019345

QP CODE: 25019345

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

B.Sc Chemistry Model III Petrochemicals

Core Course - CH4PCT05 - MANUFACTURE OF PETROCHEMICALS-II

2017 Admission Onwards

C22F8EE5

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Suggest any two physical properties of isopropanol.
2. Suggest the name of catalysts used in the preparation of acrylonitrile.
3. Name the raw material used for the preparation of chloroprene.
4. Give any two uses of acrylonitrile.
5. List out any two uses of benzene.
6. What are the constituent compounds in BTX aromatics?
7. Write the structure of Naphthalene.
8. Outline the uses of acrylic fibers.
9. What are the different types of synthetic papers?
10. How are detergents classified?
11. Mention some surfactants used in detergents.
12. What is the difference between the chemical composition of soaps and detergents?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss the manufacture of cumene from propylene.

14. How will you manufacture Acrylic acid by Reppe's synthesis?

15. Explain the production of vinyl ether.

16. Design the method of preparation of Naphthalene by hydrodealkylation method with a flowchart.

17. Design a synthetic method for the preparation of LABS.

18. Discuss the advantages of synthetic papers over conventional papers.

19. Outline the method of preparation of detergents.

20. Briefly explain the cleansing action of detergents.

21. Briefly explain the LAS and ABS detergents.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. a)Differentiate between natural glycerin and synthetic glycerin.
b) Discuss the manufacture of glycerine via acrolein.

23. Explain with a flow chart of the manufacture of

(a)Vinyl chloride
(b) Chloroprene

24. Design the preparation of BTX aromatics.

25. Discuss the diverse manufacturing processes for the production of synthetic fibers.

(2×10=20)