

QP CODE: 19101368



Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, MAY 2019

Fourth Semester

B.Sc Chemistry Model III Petrochemicals

Core Course - CH4PCT05 - MANUFACTURE OF PETROCHEMICALS-II

2017 Admission onwards

BD0F5780

Maximum Marks: 60

Time: 3 Hours

Part A

Answer any **ten** questions.

Each question carries **1** mark.

1. Mention two uses of isopropyl alcohol.
2. Mention two uses of cumene.
3. Write the structure of chloroprene
4. Reppe's synthesis is used for the manufacture of -----
5. Identify a method for the manufacture of butadiene.
6. Mention the main products formed when toluene undergoes Friedel Crafts alkylation reaction.
7. What is meant by C-4 oligomers?
8. What are polyesters?
9. The aliphatic polyamides are generally known as
10. Recall the properties of acrylic fibers
11. What are surfactants?
12. What are LAS detergents?

(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Discuss the manufacture of acrylonitrile from propylene.
14. Discuss the manufacture of vinyl chloride and explain the engineering problems related to it.
15. Discuss the manufacture of acetaldehyde by hydration method. Give its uses
16. How is crude butadiene purified?
17. Design the method of preparation of Naphthalene by hydrodealkylation method with a flowchart





18. Briefly explain the principle and the process techniques of melt spinning method for the production of synthetic fiber with a neat diagram
19. Deduce the properties and uses of different types of synthetic papers
20. Briefly explain the agglomeration process for the manufacture of detergents
21. What is the effect of soaps and detergents on oil?

(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. Discuss in detail on the manufacture of the following:
 1. Acetaldehyde from acetylene
 2. Acrylonitrile by Hydrogen cyanide process
 3. Acrylic acid
24. Design the preparation of BTX aromatics
25. Discuss the diverse manufacturing processes for the production of synthetic fibers

(2×10=20)

