

Question Bank (G scheme)

Name of subject: PCT
Subject code: 17651
Semester:VI

Unit Test: II
Course: CH

Chapter-3. Unit processes in refineries (18Marks)

3 marks question

1. What are the objectives of visbreaking
2. State the principle of catalytic reforming with reaction.
3. What is polymerization in refining operation? List the different methods of polymerization.
4. Draw the flow sheet for the esterification process carried out in the petroleum refinery.
5. What is hydration? Write the reactions in the hydration process carried out in the petroleum refinery.

4 marks question

6. Explain delayed coking process with neat diagram.
7. Explain propane deasphaltation process with neat diagram.
8. Define alkylate. Write down reactions involved in it.
9. Explain two stage hydro cracking processes with neat flow diagram.
10. What are the common gaseous emissions from petroleum refinery?
11. Write any one method of oil removal from wastewater.
12. How solid wastes are disposed from a refinery.

Chapter-4. C1 to C4 and aromatic hydrocarbons (32Marks)

3 marks question

13. List 3 chemicals derived from C3 HC and their uses.
14. List 3 chemicals derived from C4 HC and their uses..
15. Write uses (only one)of the following petrochemical
 - a. formaldehyde
 - b. styrene
 - c. MTBE
16. Explain the process for the manufacture of acetaldehyde.

4 marks question

17. Write down the reaction involved in the formation of formaldehyde & styrene
18. Draw the flow sheet for the manufacturing of methanol.
19. Draw the flow sheet for the manufacturing of ethylene oxide.
20. Draw the flow sheet for the manufacturing of propylene oxide.
21. Explain the udex process for the recovery of BTX.
22. Write down the reaction involved in the formation of butadiene & butyl acetate.
23. Give the uses of ethanol & acetaldehyde.

24. List out the products obtained from BTX and their any two uses.
25. Explain the process for the manufacture of ethanol.