QP CODE: 25022634

25022634

Reg No : .....

Name : .....

M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

Third Semester

M.Sc INDUSTRIAL CHEMISTRY

CORE - CH060303 - PETROCHEMICALS, DYES & PERFUMES

2020 ADMISSION ONWARDS

E6AC9F77

Time: 3 Hours Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is the composition of crude oil? Mention the colour and appearance of it.
2. Mention the process variables in an electrical desalting unit of crude oil.
3. Write a design of Fluidized-Bed Catalytic cracking unit.
4. What is the feedstock for polymerization in petroleum industry?
5. What is the catalyst used for the industrial production of acetic anhydride?
6. Write the preparation method of Phenyl ethanol.
7. How can we prepare phenyl acetic acid and its esters?
8. Discuss briefly the formulation of cleansing cream.
9. Give the formulation of after shaving cosmetic products.
10. List out the different types of dyes based on the chromophore present in it.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Describe the different types Lube oils.
12. Comment on the effect of crude characteristics on the performance of crude distillation.
13. Describe the various hydrotreating process in petroleum refining.
14. Write a short note on FCC in cracking process with diagram.

15. Explain catalytic isomerisation process in petroleum industry.

16. How is acetic acid produced commercially? Explain the process with chemistry involved.

17. Discuss the formulation deodorant and face powder.

18. Discuss the synthesis of (a) Naphthol Blue Black 6B (b) Naphthol Green B.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Write a detailed account on the composition of petroleum.

20. Describe in detail, various sulphur conversion processes used in refineries.

21. What is Delayed Coking? Explain with diagram. Explain various reactions involved in cracking process.

22. How is BTX produced and separated into individual components? Explain with diagram of the process.

(2×5=10 weightage)