



QP CODE: 25047661



25047661

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc Industrial Chemistry

Core Course - CH060303 - PETROCHEMICALS, DYES & PERFUMES

2020 ADMISSION ONWARDS

0E51704A

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Mention the names and composition of at least four different fractions of crude oil.
2. What are the problems associated with impurities during the processing of crude oil.
3. Draw a brief outline of a cracking reactor.
4. What are the factors affecting industrial polymerization?
5. Write down the chemistry behind the commercial production of acrylonitrile.
6. Give the preparation method of musk ambrette.
7. Give the formulation of cold cream.
8. Give the formulation of dentrifice.
9. Write the names of two acidic dyes and two basic dyes.
10. Discuss one method of synthesis of Alizarin.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Elaborate on the following thermal properties of petroleum: (a) Viscosity and viscosity index (b) Thermal Conductivity (c) Latent heat of Vapourisation (d) Spontaneous ignition temperature.
12. Elaborate on the two distinct stages of refinery distillation of petroleum.
13. Describe the Edeleanu process in petroleum refining industry.
14. Explain various types of chemical reactions involved in cracking.
15. Explain catalytic isomerisation process in petroleum industry.





16. Explain the process involved in the industrial production of nitrobenzene.
17. Explain the preparation of
 - (a) Yara-Yara
 - (b) β -ionone
18. Write a short note on the formulation of shaving and after shaving products.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Give an account on the important tests prescribed for the characterisation of Gasoline.
20. With the help of block diagram, describe the absorption and adsorption methods in crude oil treatment processes.
21. Describe the design and concept involved in Fluidized-Bed catalytic cracking.
22. Describe the following processes in detail (a) Commercial production of formaldehyde (b) Commercial production of acetic acid.

(2×5=10 weightage)

