



22103106

QP CODE: 22103106

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, OCTOBER 2022**

Second Semester

B.Sc Chemistry Model III Petrochemicals

Core Course - CH2PCT02 - TEST METHODS AND PETROLEUM PROCESSES

2017 ADMISSION ONWARDS

0BF33E10

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is asphalt?
2. What is Cetane number?
3. What is the use of distillation?
4. Define Diesel Index.
5. Identify the tests used to determine the quality of bitumen.
6. What is ATF?
7. Give expansion of JEFTOT .
8. As the aromatic content of a fuel increases, smoke point
9. What is mixed phase cracking?
10. What you meant by viscosity breaking?
11. What you meant by hydrofining and unifining?
12. What is Autoforming?

(10×1=10)

Part B





Answer any **six** questions.
Each question carries **5** marks.

13. Discuss the advantages and disadvantages of LPG over gasoline as a motor fuel.
14. What is pour point? Write a note on pour point depressants.
15. Illustrate the following (i) Pour point (ii) Octane number (iii) Flash point.
16. Explain penetration test for bitumen .
17. What is silver corrosion test? What is the significance? Give the use of silver corrosion test.
18. Design the manufacture of gasoline by cracking.
19. Briefly describe the reaction mechanism of thermal cracking process.
20. Write a short note on (a) feed stock of catalytic cracking (b) process variables of catalytic cracking.
21. What is reforming, explain catalytic reforming in detail?

(6×5=30)

Part C

Answer any **two** questions.
Each question carries **10** marks.

22. Explain the following (a) Kerosene (b) Diesel (c) Gasoline
23. Write note on (a) aniline point (b) distillation (c) Reid vapour pressure
24. Explain the following
Static electricity reducers of aviation fuels (b) Ductility test of bitumen
25. Discuss in detail about the different types of catalytic cracking process with a neat diagram.

(2×10=20)

