21101943

QP CODE: 21101943

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)EXAMINATION, AUGUST 2021

Third Semester

B.Sc Chemistry Model III Petrochemicals

Core Course - CH3PCT03 - PRODUCTION AND APPLICATION OF COMPOUNDS FROM PETROLEUM

2017 Admission Onwards

597C1ABB

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Give expansion for ONGC.
2. List out the advantages of hydrogen as a fuel.
3. How is petroleum coke manufactured?
4. How will you prepare aniline from nitrobenzene?
5. Build a chemical reaction for the ammoxidation of toluene.
6. Write the chemical formula of acrylonitrile.
7. Analyze the problems caused by the paraffin hydrates during the refining of petroleum.
8. What is Aldol condensation?
9. How is Isopropyl alcohol prepared?
10. Identify any product formed using Dow chemical process.
11. What is the change in the nature of oxides of the elements along the period in a periodic table?
12. Give expansion for PMMA.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss the manufacture of sulphur by Patial oxidation.

14. Explain Delayed coking. What are their advantages.

15. Why acidic oxides are called acid anhydrides?

16. What is oxo process? Explain its modification.

17. Explain gas hydrates.

18. Briefly outline wacker process.

19. How is acetylene manufactured?

20. What are plastics? Explain the terms thermoset and thermoplastic polymers with reference to molecular structure.

21. Illustrate condensation polymerisation using an example.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the preparation of hydrogen from naphtha cracking and by partial oxidation of hydrocarbon. Discuss the application of hydrogen in chemical industry and their uses.

23. Explain the following with suitable examples and uses:-
(a) Ammoxidation (b) Hydration (c) Hydroformylation (d) Hydrogenation

24. Discuss briefly on steam naphtha cracking of Hydrocarbon.

25. Discuss the different moulding techniques used for moulding plastics into articles. Discuss each type in detail.

(2×10=20)