23104631

QP CODE: 23104631

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE EXAMINATIONS, FEBRUARY 2023

First Semester

B.Sc Chemistry Model III Petrochemicals

Core Course - CH1PCT01 - PETROLEUM GEOLOGY

2017 Admission Onwards

70550D4A

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is biogenic theory of origin of Petroleum?
2. What is Mendeleeff's view on origin of Petroleum?
3. What is meant by diagenesis?
4. Define reservoir rock with an example.
5. Mention the different mechanisms which affect primary migration.
6. Define anticline trap.
7. Give a short account on radioactive method of oil exploration.
8. What is meant by core sampling?
9. Name any two metallic constituents in crude oil.
10. Name two types of tanks used for the storage of crude oil.
11. What is crude reservoir?
12. Give any one antiknock agent added in gasoline to increase the octane number.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Differentiate between biogenic and abiogenic theories of origin of petroleum.

14. Discuss about biodegradation and water washing.

15. Write a note on geological framework of migration and accumulation.

16. Explain hydrocarbon migration.

17. Compare offshore drilling and on shore drilling.

18. Explain the hydrocarbon compounds present in crude oil.

19. Write a short note on Transportation of crude oil.

20. Analyse the methods to remove Sulphur from distillation products.

21. What is meant by crude desalting?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. a. Explain in situ transformation of petroleum in reservoirs
b. Discuss the factors that affect the accumulation of petroleum in reservoir

23. Write a note on different types of reservoir traps.

24. (a) Discuss the composition of crude oil
(b) Give an account on elemental analysis of crude oil.

25. Discuss various crude oil distillation products.

(2×10=20)