

20 NOV 2025 BE CHEMICAL (SEM-VII) C SCHEME PRT QP CODE: 10093209

Time: 3 Hours

Total Marks: 80

Instructions to the candidates if any:-

1. Question No 1 is compulsory
2. Attempt any three questions from the remaining five questions
3. Assume suitable data wherever necessary
4. Figures to the right indicate full marks.

Q. No.1 Explain the following:

- a. Origin and formation of petroleum [05]
- b. Atmospheric Distillation and vacuum distillation [05]
- c. Flash point and Fire point [05]
- d. Reid Vapour Pressure [05]

- Q. No. 2**
- a. Give different testing methods to test the quality of gasoline. Explain any method in short with a suitable diagram [10]
 - b. Explain different tower arrangements used for crude distillation units with a suitable diagram. [10]

Q. No. 3

- a. Explain the process of desalting of crude oil with suitable diagram along with its importance. [10]
- b. Discuss LPG manufacture in detail with suitable flow diagram. [10]

Q.No. 4

- a. Explain HF alkylation in detail with the help of neat flow sheet. [10]
- b. Explain the MEK dewaxing process with neat flow diagram [10]

Q. No.5

- a. What the different type of Coking methods. Explain delayed Coking in detail with a flow diagram. [10]
- b. Explain different types of Asphalt and explain air blowing of bitumen process [10]

Q.No.6 Write short notes on the following (any Four) [20]

- a. Write short note on UOP characterization factor and correlation index
- b. Overhead corrosion in the distillation unit
- c. Merits & demerits of Bio-fuel
- d. Merox Sweetening
- e. Composition of petroleum
