

Total No. of Questions : 12]

SEAT No. :

P1110

[4659] - 300

[Total No. of Pages : 2

**B.E. (Chemical Engineering)
f: PETROLEUM REFINING**

(2008 Course) (Elective - II) (Semester - I) (409342)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answer to two sections should be written in separate answer book.*
- 2) *Answer three questions from section I and three questions from section II.*
- 3) *Neat diagrams must be drawn whenever necessary.*
- 4) *Figures to right indicate full marks.*
- 5) *Assume suitable data, if necessary.*

SECTION - I

Q1) How evaluations of petroleum are done and explain true boiling point distillation (TBP). **[18]**

OR

Q2) Describe the Specification with important test method of following petroleum products.

- a) Diesel **[9]**
- b) Gasoline **[9]**

Q3) Describe in details with sketch the vacuum distillation unit (VDU). **[16]**

OR

- Q4)** a) Explain desalting methods of crude oil. **[8]**
b) Describe with diagram working of pipe still heater. **[8]**

Q5) What do you understand by cracking? Explain various cracking operation used in industry? Explain hydrocracking in detail. **[16]**

OR

Q6) Explain with process flow diagram, reaction and effect of operating parameters on Reforming. **[16]**

P.T.O.

SECTION - II

Q7) Describe in detail various hydrotreatment used in petroleum processing and explain any one process in detail. [18]

OR

Q8) a) Explain Acid refining in detail. [8]
b) Write a note on HDS. [10]

Q9) a) Explain different methods of blending. [8]
b) Explain effect of additives addition on product quality. [8]

OR

Q10) a) Explain different methods used for storage of petroleum products. [8]
b) Discuss in details transportation of petroleum products in India. [8]

Q11) Write in details about recent trend in distillation and catalyst used in refining operation. [16]

OR

Q12) Describe Equipments used in pollution control for petroleum refining industry. [16]

