

Total No. of Questions : 6]

SEAT No. :

P435

[Total No. of Pages : 2

BE/Insem/APR - 103

B.E. (Chemical)

PETROCHEMICAL ENGINEERING

(2012 Pattern) (Elective - IV(D)) (Semester - II)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) *Answer any three questions.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable data, if necessary.*
- 5) *All questions carry equal marks.*

Q1) Provide the details of all the petrochemical products that are produced from propylene. Also explain the basic building blocks of petrochemical industry required during the processes. **[10]**

OR

Q2) Write down the importance of petrochemicals and steps involved in the preparation of feedstock for petrochemical production. **[10]**

Q3) Draw and explain a neat and labeled flowsheet for the production, separation and purification of BTX. **[10]**

OR

Q4) With a neat and labeled flowsheet, explain the production of intermediates and olefins through the naphtha cracking process. **[10]**

PTO.

Q5) Write short notes on:

a) Thermal Cracking [5]

b) Delayed Coking [5]

OR

Q6) Separation and purification techniques work hand in hand with every process in the petrochemical industry. Explain in details, the various techniques used for the same. [10]

▽▽▽▽