

2005 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

III B.TECH I SEMESTER REGULAR EXAMINATIONS

PETROCHEMICAL ENGINEERING
(CHEMICAL ENGINEERING)

NOVEMBER 2005

TIME: 3 HOUR
MARK: 80

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) *Why do you desalinate crude?*
(b) *How do you remove hydrogen sulfide from natural gas?*
2. *Write short notes on:*
 - (a) *Vacuum distillation*
 - (b) *Asphalt.*
3. (a) *What is the temperature required for naphtha cracking?*
(b) *Identify the products of naphtha cracker.*
(c) *What are the precautions you take while operating naphtha cracking?*
4. (a) *Compare the hot and cold sulfuric acid polymerization process.*
(b) *Explain the liquid phosphoric acid polymerization process with neat flow diagram.*
5. (a) *Name the gaseous saturated hydro carbons.*
(b) *How do you obtain butane and pentane in a petroleum industry?*
6. (a) *What are the uses of acrylic acid?*
(b) *How is acrylic acid produced in the industry?*
7. *Explain the uses of Isoprene and how it differs from butadiene.*
8. *Discuss the availability of feed stocks for petrochemical industry in India.*