

2005 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY**III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS
PETROCHEMICAL ENGINEERING
(CHEMICAL ENGINEERING)**

NOVEMBER/DECEMBER 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? [11+5]
2. Write short notes on:
(a) Vacuum distillation
(b) Asphalt. [7+9]
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? [5+5+6]
4. (a) Compare the hot and cold sulfuric acid polymerization process.
(b) Explain the liquid phosphoric acid polymerization process with neat flow diagram. [8+8]
5. (a) Name the gaseous saturated hydro carbons.
(b) How do you obtain butane and pentane in a petroleum industry? [8+8]
6. (a) What are the uses of acrylic acid?
(b) How is acrylic acid produced in the industry? [8+8]
7. Explain the uses of Isoprene and how it differs from butadiene. [16]
8. Discuss the availability of feed stocks for petrochemical industry in India. [16]