JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2008

III B.TECH II SEMESTER SUPPLIMENTARY EXAMINATIONS **PETRO CHEMICAL ENGINEERING** (CHEMICAL ENGINEERING)

AUG/SEP 2008

TIME-3 HOUR MARK-80

ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

- 1. What is the composition of petroleum? Explain briefly about physical properties of petroleum?
- 2. (a) Describe two stage distillation of petrochemical.
- (b) Indicate the draw temperatures of different fractions.
- 3. Discuss how the parameters influence yeild of ethylence in naphtha cracker.
- 4. (a) What is polymerization?
- (b) Give an example of polymerization for a finished product.
- (c) How does it improve the quality of gasoline.
- 5. (a) For getting good alkylated gasoline what are the paraffins required?
- (b) Alkylation is reverse of cracking Explain.
- 6. (a) What is wax.
- (b) How is wax produced in petroleum industry?
- 7. Describe the production of butadiene from ethyl alcohol?
- 8. (a) What do you mean by BTX?

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(b) Explain the manufacturing process of BTX by Catalytic reforming method with a neat flow chart.