

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS  
**FERTILIZER TECHNOLOGY**  
(CHEMICAL ENGINEERING)

APR/MAY 2006

TIME - 3 HOUR  
MARK - 80

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**Answer any FIVE Questions**  
**All Questions carry equal marks**

1. Explain the ultimate analysis of coal and its importance. [16]
2. Discuss the importance of catalyst in shift conversion. [16]
3. (a) What are the Temperature and Pressure conditions in Ammonia converter?  
(b) Give various processes in detail for manufacture of Ammonia. [10+6]
4. What is Fuming Nitric acid? Explain in detail. [16]
5. Explain in detail the stengle process for manufacturing of Ammonium nitrate with neat flow diagram. [16]
6. Discuss in detail about the economic evaluation and process for manufacture of phosphoric acid. [16]
7. Explain with a flow sheet the granulation process of the mixed fertilizer? [16]
8. Make a balance sheet of production economies of typical fertilizer plant?