**MTCH105**

**First Semester M. Tech Chemical Engineering**

**Examination Aug/Sep-2015**

**Chemical Process Economics & Management**

**Time:-3Hours** **Max. Marks: - 80**

**SECTION-A**

**Answer any five questions. (6\*5)**

1. Briefly write about molecular path synthesis.
2. Define space velocity and space time.
3. Write a short note on thermodynamic property packages.
4. What do you mean by environmental regulations?
5. Briefly write about algorithm SSG.
6. What are batch reactors?
7. Define genetic algorithms.
8. Give a brief statement on environmental protection.

**SECTION-B**

**Answer any two questions. (10\*2)**

1. Explain optimization application of economic pipe diameter.
2. Write a detail note on software used in process design.
3. Elaborate the concept of linear programming.

**SECTION-C**

**Answer any two questions. (15\*2)**

12. Explain the design procedures for liquid/ liquid extractions.

13. Describe the distillation design procedures for columns with sieve trays.

14. Write detail notes on optimum design and design strategy in engineering process design.