

Roll No

MMTP-301(A)

M.E./M.Tech., III Semester

Examination, December 2016

**Computer Aided Design of Thermal System
(Elective-I)**

Time : Three Hours

Maximum Marks: 70

- Note:** i) Solve any five questions.
ii) All questions carry equal marks.

1. How design problems are formulated? How material selection is done in computer aided design?
2. Discuss types of thermal models with details.
3. How casting and extrusion processes are simulated?
4. How thermal design of Heat engines are done?
5. Explain methods of Numerical simulation.
6. Discuss followings :
 - a) Optimization
 - b) Objective functions

7. Explain followings methods of optimization.
 - a) Calculus method
 - b) Search method
8. Write short notes on followings :
 - a) Geometric programming
 - b) Genetic algorithms
 - c) Methods of numerical simulation
