

Computer Integrated Manufacturing Systems (CIMS) MEL 852
Major Exam, Max Marks: 80, Duration 2 Hours, May 2008

1. What is MRP? As a consultant how will you guide a company whether MRP is suitable for them or not?

(20)

2. Discuss the features and a typical architecture of Manufacturing Resource Planning Systems? Hence or otherwise discuss the evolution of ERP systems?

Suggest three areas of improvement in ERP Systems?

(20)

3. What is Artificial Intelligence (AI)? Using any example, explain its key feature. Justify and/or Discard (with reasons) the statement "Solving of Linear Programming using Simplex Method is an excellent example of AI Applications".

Give computer configuration of a typical FMS. Indicate how AI can be used for performance-improvements of FMS?

(20)

4. What are Expert Systems? For the following cases in CIM system context show how an Expert System will be helpful:

- 1) Generative CAPP system and Retrieval CAPP System
- 2) Shop Floor Control Systems

Give an architecture that can combine Simulation and Expert System to help improve the performance of a complex flexible system ?

(20)