Unit IV

7. (a) Explain the integration of CAQC with CAD/CAM. **8**

   (b) Draw the block diagram of direct digital control system and explain components of it. **7**

8. Describe the artificial intelligence and expert system in CIM. **15**

CC-81

M. Tech EXAMINATION, May 2017

(Third Semester)

(Re-appear Only)

(ME)

MEP-601-B

COMPUTER INTEGRATED

MANUFACTURING SYSTEM

Time : 3 *Hours*]   [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Describe the factors responsible for the success of CIM application in present time. **8**

   (b) Write a short note on historical developments in manufacturing and automation. **7**

2. (a) Give an introduction to manufacturing system and its objectives. **8**

   (b) Explain the linking manufacturing strategies and system analysis of manufacturing operation. **7**

Unit II

3. (a) Describe different types of part classification and coding system. Explain any *one* in brief. **8**

   (b) Explain the need of computer aided process planning. What are the various approaches available for computer aided process planning ? **7**

4. (a) Draw a block diagram showing the interaction between the material requirement planning and other modules for production planning systems. **8**

   (b) Write short notes on the following : **7**

   (i) Inventory management

   (ii) Automatic identification system.

Unit III

5. Write short notes on the following terms : **15**

   (a) Production Planning and Control

   (b) Factory Data Collection System.

6. What are various types of layout used in 'FMS design ? Explain briefly about their applications. **15**