



B.E DEGREE EXAMINATIONS: NOV 2015

(Regulation 2009)

Seventh Semester

MECHATRONICS ENGINEERING

MCT121: Computer Integrated Manufacturing

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The Phrase “Computer Integrated Manufacturing” was originally coined by
 - a) James Harrington
 - b) CASA/SME
 - c) MikellGroover
 - d) Richard.G. Abraham
2. Geometric modeling is type of
 - a) CAD system
 - b) CAM system
 - c) CAPP system
 - d) CMPP system
3. In Opitz classification system, the second four digits are called
 - a) Supplementary code
 - b) Form code
 - c) Secondary code
 - d) Operation code
4. Which materials-processing technology gives the advantage of precision, accuracy and optimum use of cutting tools, which maximise their life and higher labour productivity?
 - a) Computer-integrated manufacturing (CIM)
 - b) CNC machine tools
 - c) Industrial robots
 - d) Flexible manufacturing systems (FMS)
5. Select, in which of the following is not the manual input data technique
 - a) Employee time sheet
 - b) Operational tear strip
 - c) Perpunched cards
 - d) Magnetic card reader
6. Which principle makes the FMS Possible?
 - a) GT
 - b) Cellular Manufacturing
 - c) JIT
 - d) CIM
7. Effectively managing and communicating data within a company and between Companies
 - a) Internal Communication
 - b) Data communication

23. a) Write short notes on (i) Bar code Technology (ii) Automatic identification method

(OR)

b) Write short notes on various materials handling equipment that are commonly found in a FMS.

24. a) (i) Explain the CIMOSA model with a neat diagram.
(ii) Describe product data management and its advantages.

(OR)

b) What is data communication? Identify and briefly explain the five components of a data Communication system.

25. a) Model different types of Network Topologies with examples.

(OR)

b) (i) Explain manufacturing Automation Protocol.
(ii) Explain Technical Office protocol.
