Seat No.:	Enrolment No
	AT TECHNOLOGICAL UNIVERSITY MESTER – I • EXAMINATION – SUMMER • 2013

Subject code: 710803N Date: 13-06-2013 **Subject Name: Computer Aided Production Management** Time: 10.30 am - 01.00 pm**Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Q.1 Define Group Technology. List its manufacturing and design attributes. **07** (a) **07 (b)** Define Material Requirement Planning (MRP) and explain the inputs of MRP System. Q.2Explain the Automated Layout Design Program (ALDEP). Explain the (a) 07 relationship chart and steps of ALDEP process. **(b)** Explain the orequest for proposal" approach to ERP selection. **07** OR Explain the Exponential Smoothening method of forecasting. õSmaller the **07 (b)** value of Smoothening Constant , more is the smoothening effect in forecastö ó Justify it by giving suitable example. Q.3 **07** (a) Explain Rank order clustering algorithm. What is the meaning of forecasting? Differentiate forecasting and prediction. **07 (b)** List the different types of forecasting method. OR Q.3 State the objectives of Plant Layout Design. Explain the requirement and steps (a) **07** of Computerized Relationship Layout Planning. **(b)** Describe about Detailed Capacity Planning. 07 **Q.4** 07 (a) Explain the application of Simulation in automotive industry. What is the meaning of process planning? Explain the difference between 07 **(b)** traditional and computer aided process planning. OR Explain the Johnson method of sequencing the N jobs through Three **Q.4** 07 (a) machines. Write the algorithm of the method. Discuss the phases of shop floor control system. 07 **(b)**

- Q.5 (a) Explain the Computer Aided Inspection method by giving suitable example. 07
 - **(b)** What is simulation? Explain the steps of simulation process.

07

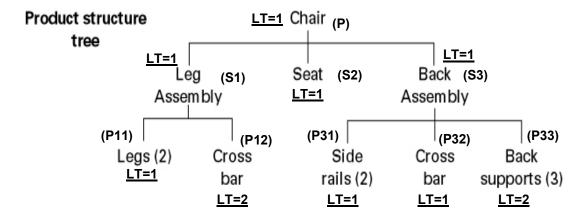
OR

Q.5 (a) Discuss the methodology for ERP implementation.

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- (b) The product structure for the wood chair (P) is shown in Fig. 1. Compute 07 MRP output for all items.

Product P is to be supplied 50 & 60 in week no. 7 & 9 respectively. The schedule receipt for product S2 is 30 in week no.3 & for product P31 is 50 in week no.4. The inventory status is given below:

Item	P11	P31
On hand	60	100



LT = Lead Time in Week

Fig. 1 The Product tree structure for product P
