

GUJARAT TECHNOLOGICAL UNIVERSITY**PDDC - SEMESTER-VIII • EXAMINATION – SUMMER 2013****Subject Code: X81903****Date: 17-05-2013****Subject Name: Computer Integrated Manufacturing****Time: 10.30 pm - 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** (a) Explain utilization of CNC machines in batch production. **07**
(b) Explain axes designation for CNC machines. **07**
- Q.2** (a) Explain G00, G01 and G03 codes with appropriate example. **07**
(b) Explain open loop and closed loop control system of CNC machines. **07**
- OR**
- (b) What is canned cycles? Explain any three canned cycles with their syntax. **07**
- Q.3** (a) Define GT. Explain parts classification and coding for GT. **07**
(b) What is composite part concept? Explain objectives of cellular manufacturing. **07**
- OR**
- Q.3** (a) Explain different types of machine cells and layouts in GT. **07**
(b) Explain different types of flexibilities in FMS. **07**
- Q.4** (a) Explain different FMS components. **07**
(b) Explain types of FMS. **07**
- OR**
- Q.4** (a) Explain common robot configurations. **07**
(b) Explain different applications of robots. **07**
- Q.5** (a) Explain Retrieval CAPP system. **07**
(b) Explain production planning and production control. **07**
- OR**
- Q.5** (a) Explain Generative CAPP system. **07**
(b) List inputs to the MRP and explain each of them. **07**
