

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII • EXAMINATION – SUMMER • 2014

Subject Code: 172506**Date: 31-05-2014****Subject Name: Flexible Manufacturing Systems****Time: 02:30 pm - 05:00 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 Queuing carrousel and automatic work changers. **07**
(b) Explain pallet and part loading in Machining Centre. **07**
- Q.2** (a) Justify the need of FMS in Today's Competitive Environment. **07**
(b) Explain various phase of FMS installation. **07**
- OR**
- (b) Explain basic components and benefits of AS/RS. **07**
- Q.3** (a) Classify and describes tool strategies in detail. **07**
(b) Draw various layout and components of FMS. **07**
- OR**
- Q.3** (a) List out the areas of FMS where tool management can be applied smoothly and effectively. **07**
(b) Compare cellular Manufacturing versus FMS. **07**
- Q.4** (a) Describe automated features and capabilities of Machining centre. **07**
(b) Compare horizontal and vertical Machining centre with neat sketch. **07**
- OR**
- Q.4** (a) Describe automated features and capabilities of Turning centre. **07**
(b) Explain CIM Hierarchy with neat sketch. **07**
- Q.5** (a) Explain AGV'S with its different guide path. **07**
(b) Explain unattended machining centre. **07**
- OR**
- Q.5** (a) List down the various types of flexibilities in brief associated with FMS. **07**
(b) Explain Group Technology with neat sketch. Also mention poly code, mono code and hybrid code with neat sketch. **07**
