

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE / ME / MBA / MCA - SEMESTER- • EXAMINATION – WINTER 2014

Subject Code:172506

Date: 29/11/2014

Subject Name: Flexible Manufacturing Systems.

Time: 10:30am TO 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) Justify the need, Benefits and limitations of FMS. **07**
(b) Explain the General layout and configuration with Principle Objectives of FMS. **07**
- Q.2** (a) List and explain Hardware and Software required for an FMS. **07**
(b) Write a short note on Unattended Machining. **07**
- OR**
- (b) Cellular versus Flexible Manufacturing. **07**
- Q.3** (a) Explain Automated features and capabilities of a Machining Centres. **07**
(b) List the reasons for Adopting Group Technology and Obstacles to Application of GT. **07**
- OR**
- Q.3** (a) Explain Automated Features and Capabilities of Turning Centres. **07**
(b) Explain Pallet and Part Loading and Programming Options in Machining Centres. **07**
- Q.4** (a) Explain Wash Station and Operation Description. **07**
(b) Explain Construction and General Functions of CMM. Importance of CMM to Flexible Cells and Systems. **07**
- OR**
- Q.4** (a) Discuss Deburring Station and Operation Description. **07**
(b) List the Basic components and benefits of Automated Storage and Retrieval Systems. **07**
- Q.5** (a) Write a short note on Tool Management **07**
(b) FMS Installation procedure in detail. **07**
- OR**
- Q.5** (a) Write a short note on Tool Strategies. **07**
(b) FMS implementation procedure in detail. **07**
