

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME Semester –III Examination Dec. - 2011

Subject code:732801

Date: 05/12/2011

Subject Name: Flexible Manufacturing System

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 (a)** What is part family? Discuss all the methods to make part family. **07**
- (b)** Define procedure for part classification and coding. **07**
- Q.2 (a)** Discuss Product flow analysis. **07**
- (b)** Why cellular manufacturing is advantageous in industry. **07**
- OR**
- (b)** Elaborate Multi class coding system. **07**
- Q.3 (a)** Explain concept of VARIANT CAPP. **07**
- (b)** What is forward and backward approach for CAPP **07**
- OR**
- Q.3 (a)** What is Computer aided process planning **07**
- (b)** What is AGV? Discuss advantage and disadvantage of AGV. **07**
- Q.4 (a)** Differentiate Conventional storage system and Automated storage system **07**
- (b)** Elaborate types of AGVs **07**
- OR**
- Q.4 (a)** Which are the components of FMS? Discuss all in depth. **07**
- (b)** Which are the communication standards used for FMS. **07**
- Q.5 (a)** Short note : MAP **07**
- (b)** What is PLC? Write methods for programming in PLC **07**
- OR**
- Q.5 (a)** Kermit protocol in manufacturing **07**
- (b)** Define GENERATIVE CAPP **07**
