

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**
