Seat No.: \_\_\_\_\_ Enrolment No.\_\_\_\_

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## M. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 732801 Date: 30/12/			2012	
Subj	ject I	Name: Flexible Manufacturing System		
Tim	e: 10	.30 am – 01.00 pm Total Marks: 70		
Inst	ruct	ions:		
		Attempt all questions.		
		Make suitable assumptions wherever necessary.		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	Elaborate part classification and coding.	07	
	<b>(b)</b>	Write short note on: Multi class coding system.	07	
Q.2	(a)	What is Computer aided process planning.	07	
	<b>(b)</b>	What is the system for part family identification (Production flow analysis). <b>OR</b>	07	
	<b>(b)</b>	What is forward and backward approach for CAPP.	07	
Q.3	(a)	Which are the components of FMS?	07	
	<b>(b)</b>	Describe conveyor and types of conveyor  OR	07	
Q.3	(a)	What is AGV? Discuss advantage and disadvantage of AGV.	07	
	<b>(b)</b>	Differentiate Conventional storage system and Automated storage system	07	
Q.4	(a)	Write down the communication standards.	07	
	<b>(b)</b>	Short note: Kermit protocol in manufacturing <b>OR</b>	07	
Q.4	(a)	What is PLC? Write methods for programming in PLC.	<b>07</b>	
Q.4	<b>(b)</b>	What is Vehicle guidance technology? Describe all the types.	07	
Q.5	(a)	What is part programming?	07	
	<b>(b)</b>	Define VARIANT CAPP.	<b>07</b>	
Q.5	(a)	OR What is Cellular Manufacturing?	07	
		_		
	<b>(b)</b>	Short note on Composite part concept.	07	

\*\*\*\*\*