

**GUJARAT TECHNOLOGICAL UNIVERSITY****M. E. - SEMESTER- III • EXAMINATION – WINTER • 2014****Subject code: 732801****Date: 25-11-2014****Subject Name: Flexible Manufacturing System****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) Write down Short note on Composite part concept. **07**  
(b) Elaborate Opitz coding system **07**

- Q.2** (a) Define GENERATIVE CAPP. **07**  
(b) What is AGV? Discuss advantage and disadvantage of AGV. **07**

**OR**

- (b) Differentiate Conventional storage system and Automated storage system. **07**

- Q.3** (a) Describe conveyor and types of conveyor. **07**  
(b) What is FMS? Explain components of FMS? **07**

**OR**

- Q.3** (a) What is part programming? Define various part programming format **07**  
(b) Define VARIANT CAPP. **07**

- Q.4** (a) Short note : Kermit protocol in manufacturing **07**  
(b) Write down the communication standards. **07**

**OR**

- Q.4** (a) Short note : MAP **07**  
**Q.4** (b) What is PLC? Write methods for programming in PLC. **07**

- Q.5** (a) What is DBMS? Write advantage of DBMS in FMS. **07**  
(b) What is Vehicle guidance technology? Describe all the types. **07**

**OR**

- Q.5** (a) What is Cellular Manufacturing? Explain in detail. **07**  
(b) Explain Multi class coding system. **07**

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