

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

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**ME - SEMESTER – IV EXAMINATION – SUMMER • 2015**

**Subject Code: 742401**

**Date: 01-05-2015**

**Subject Name: Advanced Mould Manufacturing Technology**

**Time: 02.30pm – 05.00pm**

**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) Explain CNC closed loop control system with neat sketch. **07**  
(b) Explain precision measuring and positioning of CNC. **07**
- Q.2** (a) Explain the part programming structure with suitable example. **07**  
(b) What is the role of CAD/CAM in mould manufacturing? **07**
- OR**
- (b) How will you programme tool movement? Discuss. **07**
- Q.3** (a) Explain programming using subroutines and canned cycles. **07**  
(b) What is G code? Give 6 examples. **07**
- OR**
- Q.3** (a) Write about compensation for machining centers. **07**  
(b) What is M code? Give 6 examples. **07**
- Q.4** (a) Write about different tool materials. **07**  
(b) Discuss about the softwares used for part and mould design. **07**
- OR**
- Q.4** (a) Explain end-mill and ball-nose cutters with neat sketches. **07**  
(b) Prepare a process plan for manufacturing a single cavity two plate mould. **07**
- Q.5** (a) How reverse engineering is useful for mould development? **07**  
(b) List out the advantages of machining using CAM. **07**
- OR**
- Q.5** (a) Explain stereolithography with neat sketch. **07**  
(b) What are the factors to be considered for mould making? Explain. **07**

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