



**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE – SEMESTER VIII (NEW SYLLABUS) EXAMINATION- SUMMER- 2017**

**Subject Code: 2183602**

**Date:30-04-2018**

**Subject Name: Design & Fabrication of Molds**

**Time: 10:30 AM to 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.

**MARKS**

- Q.1** (a) Define: core, gate, ejection. **03**  
(b) What are the elements of compression mold? Support your answer with neat **04**  
(c) Prepare neat labelled cross-sectional view of RPVC Pipe Die. Write the functions **07**  
of various parts.
- Q.2** (a) Write the types of compression molds. **03**  
(b) Write down the steps of transfer molding. Write its advantages. **04**  
(c) Explain the method of finding loading chamber depth of compression mold with a **07**  
product example.
- OR**
- (c) Explain direct mold clamping for injection mold in detail. Write its advantages. **07**
- Q.3** (a) What is sprue? Mention its location in the mold. **03**  
(b) Write in brief about locating ring with neat sketch. Write its importance. **04**  
(c) Explain ejector plate assembly in detail with neat figure. **07**
- OR**
- Q.3** (a) What is the function of guide pin? Mention its location in the mold. **03**  
(b) Explain in brief about Tapered location with neat sketch. **04**  
(c) Explain guiding and supporting ejector plate assembly in detail with neat figure. **07**
- Q.4** (a) For which type of product, 'Ring gate' is used? Support your answer with sketch. **03**  
(b) Explain integer cavity plate cooling with neat sketch. **04**  
(c) Explain stripper plate ejection in detail with neat figure. **07**
- OR**
- Q.4** (a) Write the type of runners. Support your answer with sketch. **03**  
(b) Explain core insert cooling with neat sketch. **04**  
(c) Explain sleeve ejection in detail with neat figure. **07**
- Q.5** (a) Define: Three plate mold. Prepare sketch to support your answer. **03**  
(b) Explain annealing of mold parts in brief. Write its advantages. **04**  
(c) Explain Electric Discharge Machining in detail. Write its advantages and **07**  
limitations.
- OR**
- Q.5** (a) Write the meaning of G00, G21, G81, M02, M08 and M19 in CNC programming. **03**  
(b) Explain Nitriding in brief. Write its advantages. **04**  
(c) Explain working of wire cut EDM machine in detail. Write its advantages and **07**  
limitations.

\*\*\*\*\*