

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 of various parts. | 07 |
| | | | |
| 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 product example. | 07 |
| 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 limitations. | 07 |
| 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 limitations. | 07 |
