

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – III • EXAMINATION – SUMMER- 2017

Subject Code: 3332302**Date: 01-05-2017****Subject Name: Compression Transfer and Injection Moulding of Thermoset****Time: 02:30 PM TO 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.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** Answer any seven out of ten. **14**
1. Define Compression moulding process.
 2. Define Transfer moulding process.
 3. Define dwell time.
 4. Define Preforms.
 5. List various types of transfer molds.
 6. List various materials use in compression molding.
 7. Write mathematical equation for Bulk factor of material.
 8. Enlist process steps in Transfer molding process.
 9. Define curing time.
 10. List various types of compression molds.
- Q.2** (a) Explain necessity of Preheating. **03**
- OR
- (a) Describe Steam heating in brief. **03**
- (b) Write advantages of Compression molding. **03**
- OR
- (b) Write dis-advantages of Compression molding. **03**
- (c) Explain Process variables for Compression molding process. **04**
- OR
- (c) Write down any two faults and their causes in Compression moulding. **04**
- (d) Write down Applications of compression moulding. **04**
- OR
- (d) Explain Post curing operation in compression moulding. **04**
- Q.3** (a) Enlist various parts of compression mold. **03**
- OR
- (a) Gives advantage and disadvantage of Semi positive mold. **03**
- (b) Give brief idea about Pressure pad. **03**
- OR
- (b) Draw flash mold for any product. **03**
- (c) With sketch explain open flash mould. **04**
- OR
- © Draw Hand compression mould for any one product. **04**

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| | (d) | Explain Volume calculation for powder well with one example. | 04 |
| | | OR | |
| | (d) | Explain Ejection method for Compression molded part. | 04 |
| Q.4 | (a) | Write Advantages of transfer moulding. | 03 |
| | | OR | |
| | (a) | Describe Venting process in Transfer mold. | 03 |
| | (b) | Explain Transfer Moulding process in brief. | 04 |
| | | OR | |
| | (b) | Explain any one cull removal technique. | 04 |
| | (c) | Differentiate Injection molding of Thermoplastic and Injection molding of Thermosetting plastic. | 07 |
| Q.5 | (a) | Draw a neat sketch of Plunger type Transfer mold. | 04 |
| | (b) | Gives construction detail of Injection Molding machine used for Thermosets. | 04 |
| | (c) | Write advantages of Injection Molding of Thermosets. | 03 |
| | (d) | Explain any one Trouble during Injection Molding of Thermosets with their causes & remedies. | 03 |
