

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA PLASTIC ENGINEERING – SEMESTER –VI • EXAMINATION –2015

Subject Code: 362305

Date: 18/05/2015

Subject Name: COMPRESSION & TRANSFER MOULD DESIGN

Time: 10:30am to 1:00pm

Total Marks: 70

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** Design and draw sectional elevation and plan of horizontal flash type semi-positive compression mould assembly for any circular shaped component having diameter 'd' and height 'h' and Explain detailed method of calculation of size of powder-well for the same. (Assume other suitable data, if required) **14**
- Q.2** (a) Compare integral pot transfer mould and plunger transfer mould. **07**
(b) Explain various mould heating techniques for thermosetting moulds. **07**
OR
(b) Compare compression mould design and transfer mould design. **07**
- Q.3** (a) List various types of compression moulds and explain any one with neat sketch. **07**
(b) Explain about Bulk factor and Powder-well. **07**
OR
- Q.3** (a) What are preforms ? Explain significance of preform alongwith their advantages and disadvantages. **07**
(b) Explain method of calculating heating load requirements of compression mould. **07**
- Q.4** (a) Write short note on 'Pressure Pad'. **07**
(b) Explain land length and land area along with its effect on flash thickness. **07**
OR
- Q.4** (a) Write short note on 'Core pins and Loose parts'. **07**
(b) Explain methods of extraction (ejection) of products in compression mould design. **07**
- Q.5** (a) Draw a neat sketch of integral pot transfer mould with nomenclature. **07**
(b) What do you mean by cull? Explain its importance and various cull removing techniques. **07**
OR
- Q.5** (a) Draw neat sketches of various gate and runner designs used in transfer mould. **07**
(b) Draw a neat sketch of plunger transfer mould with nomenclature. **07**
