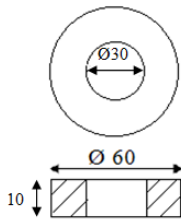


**GUJARAT TECHNOLOGICAL UNIVERSITY****Diploma Engineering - SEMESTER-VI • EXAMINATION – WINTER • 2014****Subject Code: 362305****Date: 10-12-2014****Subject Name: Compression and Transfer Mould Design****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1** Design and draw sectional elevation & plan of a semi-positive compression mould for a washer type component shown in figure for a thermosetting compound having bulk factor of 3. Assume suitable land length for powder well calculation. **14**



- Q.2** (a) Draw sectional elevation of any one type of transfer mould with nomenclature for a product of your choice. **07**  
 (b) Compare integral pot transfer mould with plunger transfer mould. **07**  
 OR  
 (b) Explain stripper plate type compression mould. **07**
- Q.3** (a) List various types of compression mould and explain any one with neat sketch. **07**  
 (b) Define 'land length'. Give significance of land area and land length in compression mould design. **07**  
 OR
- Q.3** (a) Describe in brief the method of calculating heating load requirement for compression mould. **07**  
 (b) Explain methods of ejection (extraction) for compression mould. **07**
- Q.4** (a) Define 'bulk factor'. Give significance of preform with respect to bulk factor and state advantages/disadvantages of preform. **07**  
 (b) Write short note on 'pressure pad'. **07**  
 OR
- Q.4** (a) Discuss various types of heaters used in compression mould. **07**  
 (b) Write short note on 'core pins and loose parts'. **07**
- Q.5** (a) State functions of all components of any one type of transfer mould. **07**  
 (b) What do you mean by 'Cull'. Explain importance and various techniques of cull removal with neat sketch. **07**  
 OR
- Q.5** (a) Draw various gate and runner designs used for transfer mould design. **07**  
 (b) Explain different mould heating techniques used for compression/transfer mould. **07**