

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VIII EXAMINATION – WINTER 2015

Subject Code:182301**Date:09/12/2015****Subject Name: Plastics Mould & Die Design II****Time: 2:30pm to 5:00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What are the factors affecting shrinkage of product in injection moulds? How to consider shrinkage in injection moulds while designing? **07**
(b) Explain about stripper plate ejection with the help of a sketch. **07**

- Q.2** (a) Explain about i) Ejector plate, ii) Ejector retainer plate, iii) Push back pin, iv) Blade Ejector. **07**
(b) Describe the ejection methods used for ejecting internal threaded components of injection moulds. **07**

OR

- (b) Write a short note on i) Heat Rod, ii) Heat Pipe. **07**

- Q.3** (a) How bubbler cooling is better than baffle cooling? Explain. **07**
(b) What are the methods used for cooling integer cavity plate? Briefly explain about each method. **07**

OR

- Q.3** (a) Why dog leg cam split actuation system used? Explain with suitable sketch. **07**
(b) Why collapsible core is used? What are the types of collapsible core? Explain about any one. **07**

- Q.4** (a) Write a C Program for Shot capacity of an injection mould. **07**
(b) What are the different materials used for manufacturing of Blow mould? What is the importance of cooling in blow moulds? **07**

OR

- Q.4** (a) Explain about hydraulic split actuation system used in injection moulds. **07**
(b) How to cool shallow and deep cores of an injection moulds? **07**

- Q.5** (a) What are the different types of Transfer moulds? Explain. **07**
(b) What are the different types of Extrusion dies? Explain about any two. **07**

OR

- Q.5** (a) Explain about i) Air Ejection, ii) Valve Ejection used in injection moulds. **07**
(b) What are the different parts of Two plate fully automatic injection mould? Draw the single cavity two plate injection mould for a disc of diameter 50 mm thickness 2 mm. **07**
