

11150 : Mould Design for Plastics : 8 PP 04

P. Pages : 2

Time : Four Hours

**AW - 3509**

Max. Marks : 80

- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Diagrams and chemical equations should be given wherever necessary.
 5. Illustrate your answer necessary with the help of neat sketches.
 6. Discuss the reaction, mechanism wherever necessary.
 7. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1. a) Explain pressure casting technique of mould making in detail. 7
b) What do you mean by Mould? Give its working & significance. 6

OR

2. a) What are the various types of materials used in making & construction of mould? 5
b) Describe cold hobbing process of making various parts, with the help of neat sketch. 8
3. a) Explain with design sprue, having different type of design to suit the modified mould design. 7
b) Draw & discuss how Single-Day light & Multi-Day light works? 6

OR

4. a) Define term Bolster? Discuss its various type with help of neat sketch. 6
b) Describe Integer method of making cavity/core plate with the use of local inserts? 7
5. a) Why Ejection system design is to be considered while design of mould? Explain its various technique of ejection. 7
b) Explain the importance of cooling systems in injection mould? Discuss its various type in detail. 7

OR

6. How will you determine most Economical number of cavities for an injection mould? 14

SECTION - B

7. a) Explain the calibrating devices used in pipe manufacturing process. 5

- b) Discuss in detail about foll. : **www.FirstRanker.com** **www.FirstRanker.com** 8
i) T die ii) Coat hanger die
Used for sheet extrusion process.

OR

8. a) State the fundamental design aspects for tape die and profile die. 7
b) Write basic design aspects of gear & bearing for extrusion. 6
9. a) Explain in detail standard components of compression mould with its typical design. 7
b) Discuss the factors considered while designing runner systems for compression mould. 6

OR

10. Explain working principle of positive, semi-positive & Flash type of mould, with its design features. 13
11. a) Explain with the help of neat sketch loose plate type transfer mould. 7
b) Which factors are considered while designing transfer mould. 7

OR

12. Explain the following in detail: - 14
i) Vents
ii) Clamping force
iii) Transfer pressure
