

NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN TOOL ENGINEERING & DIGITAL MANUFACTURING – CP01
IV SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JULY 2023

Subject: Mould Technology
Subject Code: CP01401T

Total Time: 2 Hr.
Total Marks: 50

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

- 1.1 Briefly describe a 'Polymer'
- 1.2 List down the two types of 'Mould Release Agents' commonly used?
- 1.3 List down four different types of injection moulding machines
- 1.4 What do you understand by 'Clamping Force'?
- 1.5 What is the purpose of 'Guide Pillars' and 'Guide bushes' in a mould?
- 1.6 How the parting surfaces are classified in a mould?
- 1.7 What is the purpose of 'Runner' in a mould?
- 1.8 List down the various sub-assemblies of ejector system in a mould
- 1.9 Write down the methods used for cooling integer-type core plate
- 1.10 What are the methods used to actuation for side core and side cavity of mould?

2.0 ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 What factors are to be considered while choosing a fillers for plastic materials?
- 2.2 Briefly define the function of a Mould
- 2.3 List down the three ways of determining the number of cavities in injection moulds.
- 2.4 List any six basic ejection technique used in moulds
- 2.5 What are the factors that affect shrinkage?
- 2.6 Explain 'Angle hole cooling system' with the help of a neat sketch
- 2.7 Mention the purpose of providing venting on mould
- 2.8 List down the three steps involved in the calculation of cooling time

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 Explain the difference between 'Thermoplastics' and 'Thermoset plastics'.
- 3.2 Briefly explain the three zones of the screw with neat sketch
- 3.3 List any eight types of gates used in a mould
- 3.4 Explain a 'Frame ejector grid' with the help of a neat sketch
- 3.5 List the Elements of mould cycle for an injection machine
- 3.6 Explain the 'Plunger Injection Cylinder machine' with the help of a neat sketch

