

- Q.24 Explain with diagram the rotational moulding machine.
- Q.25 Describe blow mould and write its applications.
- Q.26 Explain with neat sketch mould cooling system.
- Q.27 Explain the ejection system for compression mould with neat sketch.
- Q.28 Explain the main features of blow mould.
- Q.29 Enlist the main features of blow mould.
- Q.30 Write a short note on surface treatment.
- Q.31 Explain the polishing techniques for a mould.
- Q.32 Differentiate between manual polishing and power assisted polishing kits.
- Q.33 Explain the procedure for machine time estimation for mould making.
- Q.34 Explain the process for mould maintenance.
- Q.35 Write a short note on principle of specification of mould, material and machine.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Describe thermoforming. Explain the thermoforming equipments with diagram and give their use in thermoforming.
- Q.37 Explain the pre moulding technique and post moulding technique.
- Q.38 Explain the function of transfer moulding machine. Explain its various parts.

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2nd Year / Advance Diploma in Tool and Die Making Subject:- Tool Design Theory - II (Plastic Moulds)

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 A starting tube in blow moulding is known as
 a) harison b) parison
 c) garison d) none of the above
- Q.2 Which of the following cooling systems is used in injection moulding process to increase solidification rate of components made?
 a) Air jet cooling system
 b) Water cooling system
 c) Cooling with free convection
 d) Cooling with fins
- Q.3 Which of the following plastics is not used in blow molding?
 a) Terephthalate b) Polypropylene
 c) Polythene d) PVC
- Q.4 Which of the following factors is not considered in a ram type injection molding?
 a) Inner pressure of material
 b) Outer pressure of material

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- c) Volume of material
 d) Temperature of material
Q.5 Credit cards are made of
 a) Polyethylene
 b) Polypropylene
 c) Polyvinyl chloride (PVC)
 d) Polystyrene
- Q.6** RPM is only used for castings of which of the following material?
 a) Ferrous metals b) Non-ferrous Metals
 c) Plastics d) Silicone
- Q.7** For the functioning of the gating system, which of the following factors need not be controlled?
 a) Type of sprue
 b) Size of runner
 c) Temperature of molten metal
 d) Type of riser
- Q.8** Which of the following cooling systems is used in injection moulding process to increase solidification rate of components made?
 a) Air jet cooling system
 b) Water cooling system
 c) Cooling with free convection
 d) Cooling with fins
- Q.9** Up to what depth of molds is a squeezing machine used?
 a) 10 cm b) 12 cm
 c) 15 cm d) 18 cm
- Q.10** Which of the following is not a power operated molding machine?
 a) Squeeze machine
 b) Sand slinger
 c) Jolt-squeeze machine
 d) Jot-sand machine
- SECTION-B**
- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Define mould.
 Q.12 Describe compression moulding.
 Q.13 What is process set-up data.
 Q.14 Describe thermo forming.
 Q.15 Describe stack mould.
 Q.16 What is purpose of surface treatment.
 Q.17 Define trimming.
 Q.18 Define machine time estimation for mould making.
 Q.19 What is a check-list?
 Q.20 Describe tool design data.
- SECTION-C**
- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Write a short note on mass production of plastic components.
 Q.22 Explain heating and feeding system in injection mould with neat sketch.
 Q.23 Write a short note on compression moulding.