

- Q.27 Give the principle of ejection and feed system mould.
- Q.28 Explain the construction of blow mould.
- Q.29 Enlist the main properties of plastic.
- Q.30 Write a short note on surface roughness values.
- Q.31 Explain the function and advantages of power assisted polishing kits.
- Q.32 Enlist the various pre moulding technique.
- Q.33 Explain the procedure for estimating moulding cost per unit.
- Q.34 Write a short note on safety and maintenance of moulds.
- Q.35 Explain the principle of specification of mould, moulding 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 various elements of mould with diagram and give their functions.
- Q.38 Explain the design parameters of blow moulds. Give the principle of design parameters pertaining to blow mould, its machine and materials.

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**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 Milk and water bottles are made of
- Polyethylene
  - Polypropylene
  - Polyvinyl chloride (PVC)
  - Polystyrene
- Q.2 Which of the following processes of moulding is widely used for the manufacturing of bottle caps and automotive dashboards?
- Compression moulding
  - Transfer moulding
  - Injection moulding
  - Jet moulding
- Q.3 Which of the following plastics is not used in blow molding?
- Terephthalate
  - Polypropylene
  - Polythene
  - PVC
- Q.4 There is no sprue and runner system in a
- Compression mold
  - injection mold
  - extrusion mold
  - all of the above

- Q.5 R.P.M stands for which of the following moulding process?  
 a) Rotor Plastic Moulding  
 b) Raisin Pit Moulding  
 c) Rubber Plaster Moulding  
 d) Rough Print Moulding
- Q.6 Which is not a machine moulding process?  
 a) Jolting                    b) Squeezing  
 c) Sand slinging            d) Hand molding
- 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 helps connecting runner and the mold cavity?  
 a) Sprue                    b) Riser  
 c) Gate                    d) Pouring cup
- Q.9 Production rate of Injection Blow Moulding method is \_\_\_\_\_ of Extrusion Blow Moulding  
 a) lower than that  
 b) higher than that  
 c) equal  
 d) depends upon machine
- Q.10 Which of the following is not a part of Injection moulding machine?  
 a) Ejector pins            b) Sprue  
 c) Nozzle                  d) Breaker plate

## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 What plastic is used to laminate kitchen worktops?  
 Q.12 What plastic is used in injection moulding.  
 Q.13 How many types of blow Moulds are there?  
 Q.14 Describe extrusion blow mould.  
 Q.15 Define etching.  
 Q.16 Write advantages of polishing on would.  
 Q.17 Define trimming.  
 Q.18 Define cycle time for a mould.  
 Q.19 Define storage.  
 Q.20 Define purpose of surface decoration for a mould.

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Define mass production. Enlist the various equipments used in mass production of moulded plastic components.  
 Q.22 Explain ejection system in injection mould with neat sketch.  
 Q.23 Write a short note on transfer moulding.  
 Q.24 Explain with diagram the rotational moulding machine.  
 Q.25 Describe blow mould and write its applications.  
 Q.26 Explain the concept of two plate mould.