

Q.21 Explain Design and develop the Mould base in CAD.

Q.22 Write check list for maintenance of machine and moulds (any 06 points)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Write short note on :

- a) Types of ejector pin, core & cavity retainer plates.
- b) Thermoforming process and its classification.

Q.24 Explain design and drawing of three plate mould for injection moulding with complete bill of material by taking suitable example.

Q.25 Explain :

- a) Classification of blow moulds:
- b) Estimation of material weight and volume and time for mould making.

2nd Year / Advance Diploma in Tool and Die Making

Subject : Tool Design- II (Plastic Moulds)

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which one of the following is a commodity thermoplastic?

- a) Poly carbonates
- b) Acrylonitrile butadiene styrene
- c) Low density poly ethylene
- d) Nylon

Q.2 What is the function of a plunger in hand injection moulding machine?

- a) Melt the material
- b) Push the melt material in the mould
- c) Cool the material
- d) Eject the moulded part

- Q.3 Which part is an opening at the entrance of the cavity?
- a) Runner b) Gate
c) Core d) Sprue
- Q.4 Which type of mould is called Runner less mould?
- a) Compression mould b) Blow mould
c) Cold runner mould d) Hot runner mould
- Q.5 Which media is used blow the parison in hand blow moulding machine?
- a) Water b) Air
c) Gas d) Oil
- Q.6 Which is process of manufacturing a hollow plastic part?
- a) Extrusion Moulding
b) Injection Moulding
c) Blow Moulding
d) Compression Moulding

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 _____ is the steel rod that moves forward pushing the mold, when the mold opens.

- Q.8 Name two products made by blow moulding process.
- Q.9 Define Pinch-off.
- Q.10 _____ cannot be avoided in compression moulds.
- Q.11 Name two defects of Injection moulding process.
- Q.12 Name two types of Compression mould.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain Stripper plate mould.
- Q.14 Explain preliminary idea of Blow moulding process.
- Q.15 Give difference between thermoplastic and thermoset polymers
- Q.16 Give classification of ejection system in injection moulding
- Q.17 How will you calculate gate, runner and sprue size in injection moulds? Give their calculations.
- Q.18 Explain classification of surface finishing.
- Q.19 Discuss various post moulding techniques and their equipment selection.
- Q.20 Describe procedure for estimating moulding cost per unit.