

- Q.26 Name various types of thermoforming process.
Explain any one with neat sketch.
- Q.27 Give difference between Positive and semi-positive compression mould.
- Q.28 Write short note on plunger type transfer moulds.
- Q.29 Discuss types of rotational moulds.
- Q.30 Explain the method of temperature control in transfer moulding process.
- Q.31 Explain power assisted polishing kits.
- Q.32 Describe procedure for estimating moulding cost per unit hour.
- Q.33 Explain classification of simulation packages.
- Q.34 Describe standard procedures for storage of moulds.
- Q.35 Describe two methods of surface finishing.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain principle, construction and working of transfer moulding machine in detail.
- Q.37 Write short note on:
- Compare Injection moulding and blow moulding process
 - Feeding system, heating system, ejection system of injection moulding machine
- Q.38 Explain difference between compression moulding process and transfer moulding process.

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3rd Year / Advance Diploma in tool and Die making

Subject:- Tool Design Theory - III (Plastic Moulds)

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 What is freeze line in blow film?
- Its' height from die face at which the melt freeze
 - It's width from die face at which the melt freeze
 - It's diameter at which the melt freeze
 - It's radius at which the melt freeze
- Q.2 What is nominal blow up ratio for film?
- 1:2
 - 2:1
 - 1:3
 - 2:4
- Q.3 Which form of material is used in Rotational Moulding?
- Powder
 - Granule
 - Crystal
 - Liquid
- Q.4 Which process makes hollow one-piece item product?
- Rotational Moulding
 - Blow Moulding
 - Injection Moulding
 - Thermoforming
- Q.5 Which process using the side feed die?
- Sheet making
 - Pipe making
 - Blow film extrusion
 - Wire insulation

- Q.6 What type of product is produced by blow moulding process?
- a) Solid pin b) bush
c) bottle d) pipe
- Q.7 A list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts and the quantities of each needed to manufacture an end product is known as _____.
- a) Raw materials
b) Finished goods
c) Work in Process (WIP)
d) Bill of materials
- Q.8 Which type of mould requires accurate weighed charge material in compression moulding?
- a) Flash mould b) Positive mould
c) Landed mould d) Semi-positive mould
- Q.9 What is the name of called the maximum weight of plastic can be injected by single product?
- a) shot weight b) moulding cycle
c) capacity d) injection speed
- Q.10 What is the name of process in which materials is preheated in one chamber and moulded in another chamber by application of heat and pressure?
- a) Compression mould b) Transfer mould
c) Rotational mould d) Hand lay-up

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 _____ is the minimum thickness required by the plastic for vacuum forming.
- Q.12 _____ is the excess material flow out from mould in compression moulding.
- Q.13 Name three zones of barrel of Injection moulding machine.
- Q.14 _____ die is used for wire coating.
- Q.15 Name two products made by rotational moulding.
- Q.16 Mould closing and opening depends on size of the component. (True/False)
- Q.17 _____ is the function of Tie bar?
- Q.18 _____ connects cavity to runner? (sprue/gates)
- Q.19 Name two type of heating system.
- Q.20 _____ is used to keep core and cavity in alignment.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain classification of industrial application of plastics, plastics material and mould material.
- Q.22 Discuss selection parameters of Injection moulding machine.
- Q.23 Explain principle of compression moulding machine.
- Q.24 Discuss classification and function of various rotational mould.
- Q.25 Explain principles of thermoforming.