Q.33 Explain the cooling and feeding system in thermoforming

Q.34 Explain various parts of transfer mould.

Q.35 Describe screw type transfer mould.

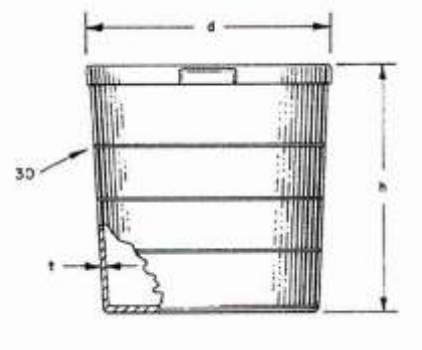
SECTION-D

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

Q.36 Explain various parts and their functions of blow moulding such as clamping, heating and ejection.

Q.37 What are flash moulds? Explain three types of flash moulds.

Q.38 Calculate the material weight and volume of following component. Estimate time in hours using process analysis for mould making and cycle time (Dimensions mm of HDPE). Take D=30mm, t=3mm, and h=100mm.



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3rd Year / Branch : 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 A shaped cavity used to give a definite form to fluid or plastic material

a) Core b) Hole
c) Blow Hole d) Mould

Q.2 The following is the part used for ejection

a) Pin b) Stripper
c) Sleeve d) All of the above

Q.3 _____plastic moulding method is used for making composites.

a) Injection moulding b) Transfer moulding
c) Blow moulding d) Rotational moulding

Q.4 _____are used to create hollow sections or cavities in a casting

a) Cavity b) Mould
c) Core d) All of the above

Q.5 Complex shaped toys are mostly made by_____

a) rotational moulding
b) blow moulding
c) injection moulding
d) none of the above

Q.6 _____mould has convex shape in thermo forming
a) Inclined mould b) Negative mould
c) Circular mould d) Positive mould

Q.7 _____is a complex condition resulting from a combination of roughness and waviness
a) Surface texture b) Surface finish
c) Micro finish d) Super finish

Q.8 Removal of excess material from finished products is known as_____
a) Metal cutting b) Trimming
c) Metal finishing d) All of the above

Q.9 Relation between weight and volume is_____
a) Weight = volume x density
b) Weight = volume x weight density
c) Weight / vol = specific gravity
d) None of the above

Q.10 The material which can be converted to any shape without fracture is known as_____
a) Mild steel b) Rubber
c) Plastic d) Aluminium

SECTION-B

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

Q.11 _____is the efficient production of a large number of similar products

Q.12 _____are substances that are made from organic substances of high molecular weight, that can be moulded into any shape.

Q.13 Name the part used for feeding in injection molding.

Q.14 Name the process that is used to manufacture plastic bottles?

Q.15 _____is the process of heating a plastic sheet placed over a mold, to manipulate and convert into 3-D shape.

Q.16 Give the application of compression moulding.

Q.17 Name any one surface treatment method.

Q.18 Define etching.

Q.19 What is the purpose of Bill of material?

Q.20 Give the unit of volume of finished products.

SECTION-C

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

Q.21 Classify various industrial applications of plastic materials.

Q.22 Describe plastic moulding processes.

Q.23 Explain clamping method in Injection moulding process.

Q.24 What are the parameters for selection of injection moulding machines.

Q.25 Give the parts of compression moulding machine.

Q.26 Enlist process setup data of transfer moulding machine.

Q.27 Classify rotational moulding machines.

Q.28 Explain core and cavity with reference to compression moulding.

Q.29 Classify thermo-forming equipment.

Q.30 Explain the principles of component geometry.

Q.31 Give the applications of transfer moulding.

Q.32 Explain the parting surface and ejection system in transfer moulding.