Q.32 What do you mean by flash mould mould? Explain inclined flash.

Q.33 Write short note on electro-forming.

Q.34 Describe two methods of surface finishing.

Q.35 Classify surface roughness values.

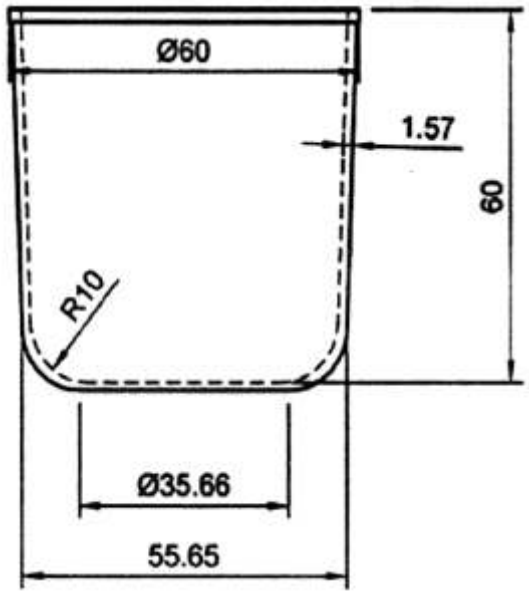
SECTION-D

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

Q.36 Compare Injection moulding and blow moulding process.

Q.37 Explain three different types of transfer moulds.

Q.38 Calculate the material weight and volume of following component Estimate time in hours using process analysis for mould making and cylce time (Dimensions mm of HDPE)



No. of Printed Pages : 4 202034

Roll No. .....

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 _____ is the efficient production of a large number of similar products.

a) Bulk production
b) Mass production
c) Continuous production
d) All of the above

Q.2 _____ are substances that are made from organic substances of high molecular weight, that can be moulded into any shape.

a) Mild steel b) Aluminum
c) Plastic d) Rubber

Q.3 Which part is used for feeding in injection molding?

a) Hopper b) Barrel
c) Screw d) All of the above

Q.4 Which process is used to manufacture plastic bottles?

a) Injection moulding b) Round moulding
c) Transform moulding d) Blow mouldng

Q.5 _____ is the process of heating a plastic sheet placed over a mold, to convert into its 3-D shape

a) Thermoforming b) Blow moulding
c) Injection moulding d) Continuous moulding

Q.6 The excess material coming out of the compression mould is known as _____

a) Trimmed material b) Flash
c) Cover material d) None of the above

Q.7 The mold polishing techniques use _____

a) wool wheels b) whetstone strips
c) sandpaper d) all of the above

Q.8 _____ is a surface modification process for a specific material by removing areas from the material surface by the effect of another material or acid.

a) Pitting b) Cleaning
c) Etching d) Sanding

Q.9 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 material

Q.10 _____ is the process of imitation of real world process on computer.

a) Simulation b) Injection analysis
c) Process analysis d) Auto CAD software

SECTION-B

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

Q.11 Define mould.

Q.12 Name one part used for ejection.

Q.13 Define transfer moulding.

Q.14 What is the purpose of core?

Q.15 What is the application of rotational moulding?

Q.16 Give the need of positive mould.

Q.17 What is surface texture?

Q.18 Removal os excess material is known as _____

Q.19 Relation between weight and volume is _____

Q.20 The material which can be converted to any shape without fracture is known as _____

SECTION-C

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

Q.21 Classify plastic mould materials.

Q.22 Describe relation between material and machine of plastic components.

Q.23 Explain the injection moulding process.

Q.24 Describe feeding in Injection moulding process.

Q.25 Enlist the process setup data for compression moulding.

Q.26 Classify Blow moulding machines.

Q.27 Explain the working principle of Rotation moulding with their parts.

Q.28 Describe the concept of thermo-forming sheet process.

Q.29 What are various elements of compression moulding process?

Q.30 Explain the method of temperature control in transfer moulding process.

Q.31 Describe the procedure of mould construction of themo forming with respect to process.