Q.27 Explain with diagram the rotational moulding machine .

Q.28 Explain the functions of power assisted polishing kits.

Q.29 Write a short note on safety and maintenance of moulds.

Q.30 What are the main parts of a compression moulding machine?

Q.31 Explain the purpose of surface treatment in mould making and its impact on final product quality.

Q.32 Discuss the benefits of accurate cost estimation in moulding production planning and budgeting.

Q.33 What are some common safety hazards associated with moulding operations, and how can they be reduced ?

Q.34 What is simulation and its application with respect to design ?

Q.35 What is the principle of selection of simulation parameters in simulation packages ?

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 design parameters of blow moulds. Give the principle of design parameters pertaining to blow mould, its machine and materials .

Q.38 Describe various parts and function of injection moulding machines.

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2nd Year / 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 Which of the following plastics is not used in blow moulding ?

a) Terephthalate b) Polyproylene
c) Polythene d) PVC

Q.2 A starting tube is blow moulding is known as

a) harison b) parison
c) garison d) None of the above

Q.3 Which of the following is not a power operated moulding machine ?

a) Squeeze machine b) Sand slinger
c) Jolt-squeeze machine d) Jot-sand machine

Q.4 Milk and water bottles are made of

a) Polyethylene b) Polypropylene
c) Polyvinyl chloride (PVC) d) Polystyrene

Q.5 There is no sprue and runner system in a

a) Compression mold b) injection mold
c) extrusion mold d) All of the above

Q.6 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.7 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.8 The primary purpose of safety measures in a manufacturing environment

a) Enhancement productivity
b) Reduce maintenance costs
c) Ensure worker well- being
d) Improve material quality

Q.9 A mould specification typically include

a) Material type used for the mould
b) Dimensions and tolerances
c) Injection Pressure settings
d) Cooling system design

Q.10 The purpose of adding mold release agents in rotational moulding

a) To improve mold strength
b) To prevent material from sticking to the mold
c) To enhance color dispersion
d) To reduce rotational speed

SECTION-B

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

Q.11 Describe stack mould.
Q.12 Define thermo forming.
Q.13 What is machine time estimation for mould making ?
Q.14 What type of plastic is used in injection moulding .
Q.15 Define cycle time for a mould .
Q.16 Write two functions of blow moulding .
Q.17 What is the material used for core ?
Q.18 How many types of blow Moulds are there ?
Q.19 Compression moulding process set-up data includes parameters such as temperature, pressure, and ____.
Q.20 The type of transfer moulding presses include hydraulic, mechanical and____ presses.

SECTION-C

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

Q.21 Describe blow mould and write its applications.
Q.22 Write a short note on compression moulding.
Q.23 Explain compression moulding process.
Q.24 Write a short note on mass production of plastic components.
Q.25 Define mass production. Enlist the various equipments used in mass production of moulded plastic components .
Q.26 Explain ejection system in injection mould with neat sketch.