Q.20 How does wall thickness control affect the quality of blow moulded products?

Q.21 Write a short note on the startup and shutdown procedure of an injection moulding machine.

Q.22 What are the applications of rotational moulding?

SECTION-D

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

Q.23 Explain in detail the construction and working of an injection moulding machine.

Q.24 Describe the process of extrusion blow moulding and discuss its applications.

Q.25 What are the major defects in rotational moulding? Explain their causes and remedies.

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5th Sem / Plastic Technology

Subject : Plastic Processing Techniques - III

Time : 3 Hrs. M.M. : 60

SECTION-A

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

Q.1 Which part of an injection moulding machine holds the molten plastic before injection?

a) Barrel b) Nozzle
c) Hopper d) Clamp

Q.2 What is the main function of the nozzle in an injection moulding machine?

a) To cool the mould
b) To heat the plastic
c) To transfer molten plastic into the mould
d) To remove air from the mould

Q.3 Which type of moulding machine uses a reciprocating screw?

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

Q.4 Which material is commonly used for rotational moulding?

a) PVC b) Polyethylene

c) Polystyrene d) Nylon

Q.5 Which parameters affects the thickness of a parison in blow moulding?

a) Injection pressure

b) Parison programming

c) Cooling rate

d) Nozzle diameter

Q.6 In stretch blow moulding, the term "blow up ratio" refers to:

a) Speed of heating

b) Stretching of perform

c) Expansion of air pressure

d) Cooling time

SECTION-B

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

Q.7 Write the main function of the barrel in an injection moulding.

Q.8 Blow moulding is commonly used for producing _____(bottles /sheets/Pipes).

Q.9 The Raw materials, generally used in rotational mouldings is in_____ form (Granular/powder / Lump)

Q.10 Write one function of clamping unit.

Q.11 Write any one process variable that can affect cycle time in injection moulding machine

Q.12 The defect in injection moulding caused by insufficient cooling is_____

SECTION-C

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

Q.13 What are the basic principles of injection moulding?

Q.14 List any four parts of an injection moulding machine and explain their functions.

Q.15 What are the common defects in injection moulding and how can they be prevented?

Q.16 Explain the importance of parison programming in blow moulding.

Q.17 What are the advantages of rotational moulding over other moulding processes?

Q.18 What is the difference between injection moulding and extrusion moulding?

Q.19 Describe the role of a perform in injection blow moulding.