SECTION-C

Note: Short answer type questions. Attempt any four questions out of six questions. (4x5=20)

Q.23 Explain difference between compression moulding and transfer molding processes.

Q.24 Write in brief about Reciprocating Screw piston Injection Unit.

Q.25 Differentiate between two and three plate mould.

Q.26 What are the advantages of gates ?

Q.27 Write the various mold coatings which are in use to protect the mold by reducing its rate of wear. Write in brief about any one.

Q.28 List down the main precautions to be taken care for transportation / handling of molds.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. 2x25=50)

Q.29 Design and Drawing a two plate mold for suitcase handle.

Q.30 Design and drawing a hot runner mould for chair.

Q.31 Design and draw a two cavity compression mould for a square block of 4.0cm side and 0.50cm thickness, to be made for phenol formaldehyde resins with specific gravity 2.0 and bulk factor 1.5.

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5th Sem. / Branch : T&D
Subject:- Plastic Mould Des. & Drg.

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Which of the following plastic is not used in blow molding

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

Q.2 Which of the following cooling systems is used in injection moulding process to increase solidification rate of components made ?

a) Cooling with free convection
b) Water cooling system
c) Air jet cooling system
d) Cooling with fins

Q.3 The flow of plastic in the mould cavity is more proper and smooth if the thickness of the component made is very small.

a) True b) False

Q.4 The correct sequence of sections in extrusion moulding machine is

a) Feed section- Compression section- metering section

b) Feed section- Metering section- Compression section
c) Compression section -Feed section- Metering section
d) Metering section-Feed section- Compression section

Q.5 Plane of meeting of two mould halves is called as _____
a) Parting surface b) Engagement surface
c) Both A and B d) None of these

Q.6 _____ is undesirable extra material appearing at parting line.
a) Runner b) Cold slug
c) Sprue d) Flash

Q.7 _____ is distortion of product surface.
a) Short shots b) Warpage
c) Sink marks d) Flash

Q.8 In breathing (compression moulding) what happens
a) Opening of mould
b) Degassing of gases formed
c) Bumping and dwell time
d) All of the above

Q.9 Vertical flashes are formed in
a) Flash type compression mould
b) Semi postive type compression mould
c) Positive type compression mould
d) None of the above

Q.10 In tempering process the steel is heated to a temperature :
a) Below the lower critical point
b) Higher than the lower critical point
c) In between the lower and upper critical point
d) Higher than the upper critical point.

SECTION-B

Note: Very Short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)

Q.11 Define clamping force.
Q.12 What is blow moulding ?
Q.13 What is Guide pillar ?
Q.14 What is Injection Rate or Injection Velocity ?
Q.15 What is applications of multicavity mould.
Q.16 Write the factors on which the layouts of the runner will depend upon
Q.17 What are sliders ?
Q.18 What is flash mould ?
Q.19 Write some cases where use of transfer moulds are more beneficial
Q.20 Why mould ventilation is important ?
Q.21 Write any one material (for each component) used in making of cavity Plates, Core Plate, Guide bush and Sprue bush.
Q.22 Why preventive maintenance of moulds is necessary?