

Q.35 Give three corrective actions to remove burn mark defect in injection moulding.

SECTION-D

Note: Long Answer type question. Attempt any two questions. (2x10=20)

Q.36 Explain with labeled diagram, different zones of injection moulding process and also explain their functions.

Q.37 Write short note on :

- a) Vacuum metallising process
- b) Screen Printing

Q.38 Discuss :

- a) Gravure printing
- b) Injection moulding of thermosets.
- b)

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4th Sem / Plastic Engineering Subject : Plastic Processing Techniques-I

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

Q.1 When ____ freezes, melt can no longer exit cavity.

- a) Gate
- b) Sprue
- c) Runner
- d) Valve

Q.2 At the end of the ____ the mould is opened and part is ejected.

- a) Melting stage
- b) Injection stage
- c) Filling stage
- d) Cooling stage

Q.3 The ____ forces the material through the nozzle and into the mould.

- a) Screw
- b) Plunger
- c) Pinion
- d) Rack

Q.4 The mould is locked in position using ____

- a) Locking handle
- b) Pinion handle
- c) Ball bearing
- d) Spring

Q.5 In three plate mould design feature a third plate represents ____

- a) Stationary
- b) Moveable
- c) Fixed
- d) None of them

- Q.6 _____ is injected into the mould to produce components.
- a) Molten plastic b) Granules
c) Powder d) Wet plastic
- Q.7 _____ is caused when injection speed is too slow.
- a) Black marks b) Bubble
c) Flow marks d) None of them
- Q.8 The most common type of gate is _____
- a) Tab b) Submarine
c) Edge d) Ring
- Q.9 Shot weight is measured in terms of _____
- a) Poly styrene b) Poly ethylene
c) Poly phenylene d) None of the above
- Q.10 Injection moulding is a _____ process.
- a) Continuous b) Batch
c) Uniform d) Random

SECTION-B

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

- Q.11 C : R ratio means _____.
- Q.12 Define plasticizing capacity.
- Q.13 How to remove entrapped air from mould?
- Q.14 _____ gate is used for tubular component.
- Q.15 Name three zones of barrel.
- Q.16 Define shrinkage.

- Q.17 Suggest any one corrective action for flashing.
- Q.18 Poor tooling design results in _____.
- Q.19 When temperature is very low _____ will formed.
- Q.20 _____ provides connection between runner and cavity.

SECTION-C

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

- Q.21 Explain electroplating.
- Q.22 Give principle of blow moulding process.
- Q.23 Define transfer moulding process and also name any two components made by this process.
- Q.24 Explain different types of screw used in injection moulding.
- Q.25 Give three corrective actions to remove flash defect in injection moulding.
- Q.26 Discuss hot stamping process.
- Q.27 Explain any 5 defects in injection moulding.
- Q.28 Explain the need of purging?
- Q.29 Explain pad printing.
- Q.30 Explain Daylight of injection moulding machine.
- Q.31 Discuss principle of rotational moulding.
- Q.32 Explain start-up and shut down procedure for injection moulding machine.
- Q.33 Explain clamping force and its types.
- Q.34 Explain Flexographic printing.