Q.26 Discuss hot stamping process.
Q.27 Explain rotational moulding technique.
Q.28 Explain elctroplating.
Q.29 Discuss electrical control systems of Injection molding.
Q.30 How projected area is calculated for injection moulding machine.
Q.31 Give four advantages of injection moulding process.
Q.32 Explain start-up and shut down procedure for injection moulding machine.
Q.33 Explain encapsulation technique
Q.34 Explain principle of co injection
Q.35 Explain any four defects and remedies in injection moulding process.

SECTION-D

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

Q.36 Explain with labeled diagram, construction and working principle of Injection moulding machine.
Q.37 Explain :
a) Flexographic printing.
b) Selection criteria for selection of injection moulding machine
Q.38 Discuss :
a) Screen printing
b) Various electrical and electronics control of injection moulding machine.

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

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Which is the remedy for sink marks defects in injection moulding?
a) Insufficient pressure
b) Increase hold on pressure
c) Poor part design
d) Excessive

Q.2 Which of the following is a type of clamping mechanism?
a) Hydraulic b) Toggle
c) Both a and b d) None of these

Q.3 What should be done to remove flow lines in injection moulding?
a) Increase injection pressure
b) increase nozzle diameter
c) rounding of corners
d) All of them

Q.4 Where does the granular molding material get loaded?

a) Screw b) Barrel
c) Pellets d) Hopper

Q.5 How many zones are there in injection screw
a) 1 b) 2
c) 3 d) 4

Q.6 Injection moulding is a _____ process.
a) Continuous b) Batch
c) Uniform d) Random

Q.7 Dimensional distortion in a plastic object after molding is known as_____.
a) Slippage b) Flash
c) Warpage d) Leakage

Q.8 The_____ provides the connection between runner and mould cavity.
a) Gate b) Sprue
c) Cavity d) Core

Q.9 What should be done to remove flow lines in injection moulding?
a) Increase injection pressure
b) increase nozzle diameter
c) rounding of corners
d) All of them

Q.10 _____is the function of mould Runner?
a) Vent trapped air
b) Provide entry in to the mould cavity
c) Define the mould parting line
d) Provide a path to the mould gates

SECTION-B

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

Q.11 Name two defects of Injection molding process.

Q.12 _____is used to keep core and cavity in alignment.

Q.13 L/D ratio stands for_____.

Q.14 _____ is the units in which injection speed is expressed?

Q.15 Name two components of feed system.

Q.16 Which zone covers the 50% length of the injection moulding screw? (Feed/metering zone)

Q.17 Why cooling system is required?

Q.18 _____connects cavity to runner? (sprue/gates)

Q.19 _____ is the name of called the maximum weight of plastic can be injected by single product?

Q.20 Which material is used as standard for determining the capacity of an injection moulding machine?

SECTION-C

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

Q.21 State principle of blow moulding

Q.22 Discuss various zones of injection moulding machine.

Q.23 Define press capacity.

Q.24 Explain different types of screw used in injection moulding.

Q.25 Explain clamping force and its types.