

SECTION-D

No. of Printed Pages : 4

222233

Roll No.

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

Q.23 Explain various materials used for dies and moulds.

Q.24 Write short note on:

- a) Integer and insert type of moulds
- b) Types of gates

Q.25 Explain:

- a) Balancing of runners
- b) Ejection Techniques

3rd Sem / Plastic Technology

Subject : Design of Dies and Mould - I

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

Q.1 _____ is produced by joining of cavity and core part of the mould.

- a) Meld line
- b) Breaking line
- c) Parting line
- d) None of them

Q.2 Name gate used in plastic mould design.

- a) Fan gate
- b) Ring gate
- c) Diaphragm gate
- d) All of them

Q.3 The size of the runner depends on the size of the part and its wall thickness.

- a) True
- b) Depends on both
- c) Does not depend on any of them
- d) False

Q.4 _____ of runner is important for uniform cavity filling.

- a) Fencing
- b) Balancing
- c) Tapering
- d) None of these

Q.5 Joining of two flow front during processing creates _____ lines.

- a) Weld lines
- b) Flow lines
- c) Both a & b
- d) None of these

Q.6 A pin (in a mold) that directly pushes the molded part out of the cavity is called _____.

- a) Guide pin
- b) Ejector pin
- c) Core pin
- d) All of them

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

Q.7 State functions of gates.

Q.8 Give function of runner in feed systems.

Q.9 _____ is used as coolant for moulds.

Q.10 Size of the gate should be kept _____ for good design.

Q.11 Define register ring.

Q.12 Name two mould materials used injection moulding moulds.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. $(8 \times 4 = 32)$

Q.13 What is sprue-puller? Explain its role in ejection system

Q.14 Discuss various factors needed for deciding the size of runner.

Q.15 Discuss criteria for selection of parting surface.

Q.16 Discuss importance of gates in mould design.

Q.17 Explain Bolster plate and its types

Q.18 Explain register ring and its importance.

Q.19 Explain cooling insert bolster assembly and its types

Q.20 Define guide bush and guide pillars.

Q.21 Define ejector grid and its function.

Q.22 Explain three plate mould with diagram.