

Q.24 Write short note on:

- a) Various materials and their selection criteria
- b) Product life cycle and its stages.

Q.25 Explain various types of welding methods and their types with the help of neat sketch.

No. of Printed Pages : 4

Roll No.

222262

6th Sem.

Branch : Plastic Technology

Sub.: Plastic Product Design

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

Q.1 _____ should be the draft angle used in plastic products.

- a) 5°
- b) 6°
- c) 4°
- d) 1/2°

Q.2 The aim of feasibility study is _____.

- a) To determine sources and profitability of organisation
- b) To improve mould design.
- c) To give reaction in polymers
- d) None of the above

Q.3 Preliminary design consideration are needed to _____.

- a) Reduce cost
- b) To calculated direct raw material cost
- c) For better design
- d) All of these

- Q.4 PLC stands for
 a) Product life circle b) Product life cycle
 c) Plastic life circle d) Product last cycle
- Q.5 Which of the following is not a type of welding?
 a) Ultrasonic b) Induction
 c) Rivet d) Hot gas
- Q.6 _____ should be the minimum meeting angle where weld line disappear.
 a) 90-100 b) 60-80
 c) 120-150 d) 180-200

SECTION-B

- Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)**
- Q.7 Instead to having one heavy rib, we should design two thin ribs. (True / False)
- Q.8 Name two permanent joining methods used in plastic assembly.
- Q.9 Name two main types holes used in plastic product design.
- Q.10 Name two main types of moulded inserts.
- Q.11 Alphabets and letters are generally used for _____.
- Q.12 Give two disadvantages of non-uniform wall thickness.

SECTION-C

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

- Q.13 Write short note on tolerance limits and their types.
- Q.14 Discuss cost economics.
- Q.15 Explain various type of shapes used in plastic product design.
- Q.16 Explain various processing limitations in plastic product design.
- Q.17 Write short note on undercuts.
- Q.18 State various stages of new product development.
- Q.19 Define texturing and various techniques for its manufacturing.
- Q.20 Explain importance of gate side and its location in plastic design.
- Q.21 Explain positioning of holes.
- Q.22 Explain surface finish used in plastic product design.

SECTION-D

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

- Q.23 Explain various preliminary design considerations used in plastic product design.