

- Q.27 Discuss on stages on product development.
 - Q.28 What is product life cycle.
 - Q.29 What is feasibility study.
 - Q.30 Give difference between artistic and engineering shapes.
 - Q.31 Discuss gate size and location.
 - Q.32 Discuss inside sharp corners.
 - Q.33 Explain two long term properties.
 - Q.34 Explain insert and their types.
 - Q.35 Explain undercuts and their classification.

SECTION-D

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

- Q.36 Discuss various stages of product development.

Q.37 What are preliminary design considerations?
Explain their importance in product design.

Q.38 Write short note on cost economics and its selection.

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6th Sem / Plastic, Chem. Engg. (Spl. Polymer Tech)

Sub.: Plastic Product Design

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 The life cycle of a product includes

 - a) Extraction of natural's resources
 - b) Processing of raw materials
 - c) Manufacturing of product
 - d) All of these

Q.2 The mechanical properties of good product materials are

 - a) Strength
 - b) Toughness
 - c) Ductility
 - d) All of these

Q.3 Post processing operation is/are

 - a) Printing
 - b) Painting
 - c) Electroplating
 - d) All of these

Q.4 Nominal design of wall thickness the molten material flows

 - a) Thick to thin section
 - b) Thin to thick section
 - c) Both A & B
 - d) None of these

Q.5 Parting line presents on

- a) Outer surface of product
- b) Inner surface of product
- c) Both A & B
- d) None of these

Q.6 Bosses are

- a) Protruding stud b) To give strength
- c) Both A & B d) None of these

Q.7 Ribs are provided

- a) To give strength b) Locking purpose
- c) Both A & B d) None of these

Q.8 Threads are provided to

- a) Locking purpose b) Making leak proof
- c) Both A & B d) None of these

Q.9 Blind holes are

- a) One side open b) Both side open
- c) Both A & B d) None of these

Q.10 Tapering is done for

- a) To reduce thickness b) For providing finish
- c) Both A & B d) None of these

SECTION-B

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

Q.11 Define ribs.

Q.12 Define bosses.

Q.13 Define weld line.

Q.14 Define parting surface.

Q.15 Define threads.

Q.16 Define undercuts.

Q.17 Define texturing.

Q.18 Expand EDM.

Q.19 Define taper.

Q.20 What is parting line?

SECTION-C

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

Q.21 Give four advantages of drilled holes over molded holes.

Q.22 What is wall thickness.

Q.23 Discuss surface finish.

Q.24 Discuss limitation of plastic design.

Q.25 Discuss material selection and its characteristics.

Q.26 Discuss radii and fillets.

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