

- Q.26 Explain L/D ratio and its importance.
  - Q.27 Explain pad printing.
  - Q.28 Give five defects of extrusion process.
  - Q.29 Explain installation and commissioning of plant and machinery.
  - Q.30 Explain extruder and their curves.
  - Q.31 Explain flexographic printing.
  - Q.32 Give four troubleshoots of calendering process.
  - Q.33 Discuss plastic-plastic laminates.
  - Q.34 Explain Take-off devices used in extrusion.
  - Q.35 Give advantages of twin screw extruder.

## **SECTION-D**

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

- Q.36 Explain principle, construction and working of vented barrel extruder with neat sketch.

Q.37 Explain :

  - Screen printing process.
  - Various types of screw used in plastic extrusion.

Q.38 Write short note on :

  - Heating and cooling system of calendaring process.
  - Objective and importance of maintenance.

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**3rd Sem / Plastic Engineering  
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 of the following plastic is used in the lamination of paperboards?

a) LDPE                      b) PS  
c) PVC                      d) HDPE

Q.2 The process involved in converting rubber into thin sheet or coating it on fabric is called \_\_\_\_\_.  
a) Extrusion                  b) Calendering  
c) Mastication                d) Vulcanisation

Q.3 \_\_\_\_\_ enhances mixing of the material.

a) Twin screw extruder  
b) Single screw extruder  
c) Hand extruder  
d) Barrel

Q.4 The part weight is directly proportional to the \_\_\_\_\_ of the component.

- a) Shrinkage
- b) Warpage
- c) Wall thickness
- d) Bend

Q.5 \_\_\_\_\_ is used while cooling to control the dimensions of extruded component.

- a) Mould
- b) Die
- c) Water
- d) Jig

Q.6 An opening in barrel wall to remove air and volatile matter is known as:

- a) Hopper
- b) Die
- c) Barrel Vent
- d) Orifice

Q.7 A dirty screen pack can block the flow and increase \_\_\_\_\_.

- a) Barrel temperature
- b) Barrel pressure
- c) Back pressure
- d) Screw speed

Q.8 In compression zone \_\_\_\_\_ takes place.

- a) Pumping
- b) Feeding
- c) Drying
- d) Plasticizing

Q.9 Application of a liquid coating over a relatively small surface area is called

- a) Printing
- b) Cleaning
- c) Removing
- d) None of these

Q.10 Name the printing process in which finished part look like metal is \_\_\_\_\_?

- a) Screen printing
- b) Rotogravure
- c) Pad printing
- d) Electroplating

## SECTION-B

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

- Q.11 Give two applications of Calendering technique.
- Q.12 Give a function of sizing unit.
- Q.13 Define die swell.
- Q.14 Name two dies used in extrusion process.
- Q.15 When will screw speed decrease?
- Q.16 What is to be done to improve the appearance of rough extrudate?
- Q.17 What is the significance of upper lip of a sheet extruder?
- Q.18 Define breaker plate.
- Q.19 Define preventive maintenance.
- Q.20 Give two applications of flexographic printing.

## SECTION-C

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

- Q.21 Explain importance of stretching and orientation in extrusion.
- Q.22 Name different types of calender rolls. Explain any one.
- Q.23 Explain breakdown maintenance.
- Q.24 Explain die swell in blown film.
- Q.25 Explain hot stamping process.