

- Q.25 Define compression ratio of screw. Give compression of GP screw.
- Q.26 Write a note on twin screw extruder give the types also.
- Q.27 What is extrudate swell. How is it controlled.
- Q.28 Why machine maintenance is importance. Give four reasons.
- Q.29 With a neat sketch, write down the vented barrel extruder.
- Q.30 With a neat and labelled diagram write down the wire coating process.
- Q.31 With a neat and labelled sketch, write down the process of inverted L calendar.
- Q.32 Draw a sketch to show the effect of melt temperature on extruder output.
- Q.33 Give the electrical methods for heating calendar rolls.
- Q.34 Define stretch ratio and give its formula.
- Q.35 Give four significance of L/D ratio of screw.

SECTION-D

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

- Q.36 With a neat sketch, define screen pack and breaker plate, Give uses of each.
- Q.37 With a neat and labelled diagram. Write down the process of pipe extrusion.
- Q.38 With a neat and labelled diagram. Write down the technique of gravure printing.

No. of Printed Pages : 4
Roll No.

182232

**3rd Sem.
Branch : Plastic Tech.
Sub: Plastic Processing Techniques – I**

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 Injection moulding process is an example of
 a) Deformation of polymer melt
 b) Deformation of polymer in rubbery state
 c) Deformation of low M.W. polymer
 d) Machining Technique
- Q.2 SSE stands for
 a) Soft screw extruder
 b) Sharp screw extruder
 c) Single screw extruder
 d) Shark screw extruder
- Q.3 Which of following zone of screw is also called Transition Zone
 a) Feed Zone
 b) Compression zone
 c) Metering zone
 d) Die zone

- Q.4 Bubble casing is a term used in
 a) Extrusion Blow Moulding
 b) Blow film process
 c) Extrusion of filament
 d) Extrusion of pipes
- Q.5 Which of the following is most commonly used material for making calendar rolls
 a) Aluminium b) Bronze
 c) Steel d) Wood
- Q.6 In Pad printing process the pads are commonly made with
 a) PE b) Epoxy Resins
 c) Silicone rubber d) ABS
- Q.7 The MFI value of plastics material used in rotomoulding process is
 a) £1 b) £2
 c) £3 d) £4
- Q.8 Products made by mould are
 a) 1D b) 2D
 c) 3D d) 4D
- Q.9 Which material requires screw compression ratio of 4.5:1
 a) PE b) Nylon
 c) ABS d) PC
- Q.10 In term BUR, B stands for
 a) Buffer b) Bullet
 c) Blow d) Big

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Define the term Painting.
 Q.12 Which materials is most commonly used in calendaring process.
 Q.13 Give difference between pipe and tube.
 Q.14 Expand the term TSE.
 Q.15 With one reason, write the requirement of machine maintenance.
 Q.16 Define Die.
 Q.17 Give a typical rpm ratio of major to minor axis in rotomoulding process.
 Q.18 Name the process in which nip rolls are used.
 Q.19 Which processing method is used to make bottles.
 Q.20 Expand the term BUR.

SECTION-C

- Note:** Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)
- Q.21 Write down the steps involved in pad printing process.
 Q.22 With a neat sketch write down the process of Z-type calendar.
 Q.23 Write down the steps involved in making plastics tubes.
 Q.24 Write down the two points with reasons which you will consider during installation of injection moulding machine.