

- Q.30 Discuss for applications of rotational moulding machine.
- Q.31 Discuss various applications of blow moulding machine.
- Q.32 Explain merits of injection moulding process.
- Q.33 How will you select injection moulding machine for particular application.
- Q.34 Discuss the process requirements for moulding of water tank in rotational moulding M/C.
- Q.35 Distinguish between shear rate & injection pressure.

SECTION-D

- Note :** Long Answer type question. Attempt any two questions. (2x10=20)
- Q.36 Discuss various defects and their remedies in injection moulding process. (Any five defects)
- Q.37 Write short note on :
- Effect of process variable on end product quality in rotational moulding.
 - Merits and demerits of Rotational moulding process.
- Q.38 Discuss:
- Blow moulding for irregular shapes.
 - Parison programming

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5th Sem, **Branch :** Plastic Engineering
Subject : Plastic Process Techniques-3

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Clamping Pressure is always _____
- Higher than injection pressure
 - Lower than injection pressure
 - No relation with injection pressure
 - All of these
- Q.2 Incorporated of Metal insert during injection moulding is _____.
- Possible
 - Can't say
 - Not possible
 - None of these
- Q.3 Cleaning one colour or type of material from the cylinder of an injection moulding machine by forcing it out with a new colour or material is called _____
- Surging
 - Purging
 - Merging
 - None of these
- Q.4 Make sure the machine is at _____ before processing
- Mould temperature
 - Bulk temperature

- c) Processing temperature
d) Melt temperature
- Q.5** _____ is injected into the mould to produce the moulded products.
a) Molten plastic b) Plastic granules
c) Wet Plastic d) Un-Molten Plastics
- Q.6** Purpose of Dehumidifier:
a) To melt material b) To clean material
c) To remove moisture d) All the above
- Q.7** How many zones are there in injection screw:
a) 1 b) 2
c) 3 d) 4
- Q.8** The reason for short shot in injection moulding is _____.
a) Insufficient charging of material
b) Low injection pressure
c) Low injection speed
d) All of these
- Q.9** The defects of partial filling of a mould cavity or cavities is called _____.
a) Flash b) Short shot
c) Shark skin d) None of these
- Q.10** Dimensional distortion in a plastic object after moulding is known as _____.
a) Slippage b) Flash
c) Warpage d) Leakage

SECTION-B

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

- Q.11** Poor tool design result in _____.
Q.12 Name two defects of injection moulding.

- Q.13** _____ is used to inflate the parison.
Q.14 Name two products made by blow moulding.
Q.15 A _____ occurs if two emerging melt fronts flow parallel to each other and create a bond between them.
Q.16 _____ occur during the cooling process if certain areas of the part are not cooled sufficiently causing them to contract.
Q.17 Name two products made by rotational moulding.
Q.18 Variation in dimension that may be permitted is called as _____.
Q.19 Name different types of mandrel used in blow moulding process.
Q.20 _____ is used to remove excess air in the mould

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21** Discuss principle of injection moulding process.
Q.22 Explain start up and shut down procedure for injection moulding machine.
Q.23 Explain process variables and control systems for injection moulding machine.
Q.24 Discuss injection moulding for thermosets.
Q.25 Write short note on injection blow moulding.
Q.26 Discuss trouble shootings of rotational moulding process.
Q.27 Give difference between injection moulding and blow moulding.
Q.28 Explain parison blowing system.
Q.29 Explain heating and cooling systems for rotational moulding.