

- Q.28 Name different types of rotational moulding machines. Explain any one in short.
- Q.29 State four defects in vacuum forming process and their remedies.
- Q.30 Explain Hand lay-up technique for FRP.
- Q.31 Discuss for applications of compression moulding.
- Q.32 Write short note on vacuum forming.
- Q.33 Explain pot capacity in Transfer moulding.
- Q.34 Discuss foam moulding process.
- Q.35 State four defects in transfer moulding process and their remedies.

#### **Section-D**

**Note:** Long answer Questions. Attempt any two Questions out of three Questions.  $(2 \times 10 = 20)$

- Q.36 With the help labelled diagram, explain transfer moulding process in details.
- Q.37 Write short note on :
- Plug assisted forming
  - Pultrusion technique for FRP.
- Q.38 Discuss :
- Types of calendar rolls with diagram.
  - Working of compression moulding machine.

B)

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### **Plastic Engineering**

#### **Subject : Plastic Processing Techniques-III**

Time : 3 Hrs.

M.M. : 100

#### **SECTION-A**

**Note :** Multiple choice questions. All questions are compulsory.  $(10 \times 1 = 10)$

- Q.1 What is the speed of mould rotation in rotational moulding?
- 40 rotations/minute
  - 20 rotations/minute
  - 30 rotations/minute
  - 25 rotations/minute
- Q.2 Which kind of fibre is widely used in FRP?
- Asbestos fibre
  - Ceramic fibre
  - Banana fibre
  - Glass fiber
- Q.3 Which angle rotational moulding machine rotates?
- 360
  - 180
  - 90
  - 120
- Q.4 What defect occurs when moisture is present in the raw material of compression mould?
- Warpage
  - Blistering
  - Thick flash
  - Mould sticking
- Q.5 What is the term for volatile gases that escape from moulds during compression moulding?
- Shaping
  - Culling

- c) Breathing                  d) Flashing
- Q.6** What is the ideal material for processing in compression mounting?
- Plastics
  - Thermoplastic
  - Thermo setting plastics
  - None Ferrous materials
- Q.7** Which process is used in making FRP articles?
- Injecting moulding
  - Blow moulding
  - Hand lay up
  - Transfer moulding
- Q.8** Which of the following process makes epoxy mould?
- Casting
  - Machining
  - Hot press moulding
  - Injection moulding
- Q.9** What is expansion of the FRP?
- Fibre Reinforced Plastics
  - Fibre Reinforced Panel
  - Fibreglass Reinforced Panels
  - Fibreglass Reinforce Plywood
- Q.10** What is the name of the process in which materials is preheated in one chamber and moulded in another chamber by application of heat and pressure?
- Compression mould
  - Transfer mould
  - Rotational mould
  - Hand lay-up

### Section B

- Note:** Objective types Questions. All Questions are compulsory. (10x1=10)
- Name two defects n compression moulding process.
  - How many plates are there in the moulds for transfer moulding process?
  - Name two defects of FRP moulding.
  - Which process makes water storage tank?
  - Name two products made by calendering process.
  - Foam generally consists of \_\_\_\_\_ structure.
  - Give two types of blow moulding process.
  - Expand DMC \_\_\_\_\_.
  - Name two products made by pultrusion.
  - Give two advantages of Drape forming?

### Section-C

- Note:** Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)
- Explain general principle of compression moulding process.
  - Discuss various types of welding.
  - How wall thickness is controlled in rotational moulding.
  - State basic principle of Transfer moulding machine.
  - State major applications of calendering process.
  - Discuss casting of polyesters.
  - Explain importance of mould venting.