

17550

**21819**

**3 Hours / 100 Marks**

Seat No.

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- Instructions :** (1) Answer each next main Question on a new page.  
(2) Figures to the right indicate full marks.

**Marks**

**1. Answer any TEN :**

**10 × 2 = 20**

- (a) Name the heating methods used in rotational moulding.
- (b) Enlist different forms of moulding compounds used in compression moulding.
- (c) State the principle of calendering.
- (d) Write any two limitations of solvent cementing.
- (e) What is buffing ?
- (f) Surface treatment plays an important roll in decorating plastics. Justify.
- (g) Why is breathing necessary in compression moulding ?
- (h) List down the names of any four rotomoulding products.
- (i) Write function of mills and strainers in calendering process.
- (j) Why is 'Shrinkage' observable in transfer moulding ?
- (k) How is temperature of roll controlled in calendering ?
- (l) State applications of hot gas welding.
- (m) State functions of decals.
- (n) State the need of electroplating.

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**P.T.O.**

**2. Answer any TWO :****2 × 8 = 16**

- (a) Describe any two types of preheating used in compression moulding.
- (b) (i) With a labelled diagram, explain construction and working of a batch type rotomoulding machine.  
(ii) State its advantages and disadvantages.
- (c) Compare various aspects of transfer and compression moulding.

**3. Answer any TWO :****2 × 8 = 16**

- (a) Explain any two trouble-shooting problems in compression moulding. Suggest their remedial measures.
- (b) (i) Explain screw type transfer moulding process.  
(ii) Write any four common defects observed in transfer moulding. State their causes and remedies.
- (c) With a labelled diagram, explain working of independent arm type rotational moulding machine.

**4. Answer any TWO :****2 × 8 = 16**

- (a) Explain working of two methods of blending along with their comparison.
- (b) Describe :
  - (i) Ultrasonic welding
  - (ii) Hot plate welding
- (c) With a labelled diagram, explain various calender configurations and write their applications.

**5. Answer any TWO :****2 × 8 = 16**

- (a) Describe constructional features and working of takeoff stripper section OR embosser in calendering with a labelled diagram.
- (b) Explain :
  - (i) Flexographic printing
  - (ii) Screen printing
- (c) Describe any two types of finishing process in plastics.

**6. Answer any TWO :****2 × 8 = 16**

- (a) Describe the technique of :
    - (i) laser marking
    - (ii) flocking
  - (b) (i) Describe any four joints design of adhesive bonding of plastics with diagram.
    - (ii) State general rules for cementing of plastics.
  - (c) Elaborate the decorating processes.
    - (i) vacuum metallising
    - (ii) electrolytic plating
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