



17550

14115

3 Hours/100 Marks

Seat No.

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- Instructions :** (1) **All** questions are **compulsory**.
(2) Answer **each** next **main** Question on a **new** page.
(3) Illustrate your answers with **neat** sketches **wherever** necessary.
(4) Figures to the **right** indicate **full** marks.
(5) **Assume** suitable data, if **necessary**.
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MARKS

1. Answer **any ten** :

(10×2=20)

- State any two limitations of transfer moulding.
- Define calendering.
- Identify any one defect in compression moulding. State its one cause and one remedy.
- Why are plastics decorated ?
- Which are the plastics used for calendering process ?
- State the purpose of finishing.
- Define hot plate welding.
- Write down the importance of preheating.
- Write the functions of mills and strainers in calendering process.
- Define hot gas welding.
- Identify any one defect in rotomoulding. State its causes.
- What is the need of surface pretreatment in decoration of plastics ?
- What is the effect of preforming on compression moulding cycle ?
- Enlist the various techniques of surface pretreatment.

2. Answer **any two** :

(2×8=16)

- Explain the basic process of rotomoulding.
 - State its advantages and disadvantages.
- Explain the process of electroless plating and electrolytic plating.
- Explain with suitable examples.
 - Fabrication of plastics by cementing and adhesive bonding.
 - State their advantages.

P.T.O.

3. Answer **any two** :

- a) i) Explain the process of hot transfer.
ii) State its four advantages and four disadvantages.
- b) Explain :
 - i) Dielectric heat sealing.
 - ii) Induction welding process.
- c) i) Write a typical blending method.
ii) Scrap and cold trim handling.

4. Answer **any two** :

(2×8=16)

- a) Differentiate between the process of compression moulding and transfer moulding.
- b) i) Draw labelled diagrams of upstroking and downstroking types of compression moulding machines. 6
ii) Write limitations of hand operated compression moulding. 2
- c) i) Describe the construction of independent arm type and jacketed type rotomoulding machines. 6
ii) Name types of heating and cooling systems in rotomoulding. 2

5. Answer **any two** :

(2×8=16)

- a) i) Compare between calendering and extrusion. 4
ii) State any four applications of calendered sheet or films. 2
iii) Name two trouble shooters in calendering. 2
- b) Explain principle of flexographic and screen printing processes.
- c) Explain :
 - i) Spin welding and
 - ii) Ultrasonic welding process

6. Write short notes on **any two** of the following :

16

- a) Draw a labelled diagram and explain working of transfer moulding machine.
 - b) Explain two methods of preheating in compression moulding.
 - c) Describe technique of : i) dyeing ii) flocking .
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