

22452

11920

3 Hours / 70 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.
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following:** **10**
- State the principle of buffing technique.
 - Enlist any four resins used in adhesive bonding.
 - Classify adhesives.
 - State any two equipments used for thermal sealing of films and sheets.
 - State the utility of laser marketing and dyeing.
 - Suggest the printing methods used for PVC pipe and bottle cap.
 - State the need of powder coating on plastic.

P.T.O.

- 2. Attempt any THREE of the following: 12**
- a) Describe the procedure of tumbling technique.
 - b) Explain capillary method for application of solvent in solvent cementing.
 - c) Explain shrink fitting and snap fitting for thermoplastics along with it's applications.
 - d) Describe hot transfer process of decorating the plastic.
- 3. Attempt any THREE of the following: 12**
- a) Describe fluidised bed method of plastic coating.
 - b) Explain the principle consideration for machining tool geometry.
 - c) Draw neat sketch of any four Adhesive joints.
 - d) Explain with neat figure the hot gas welding technique.
- 4. Attempt any THREE of the following: 12**
- a) Explain with neat figure the induction welding.
 - b) Explain with neat figure the corona discharge technique for surface treatment of plastic.
 - c) Explain any one powder coating manufacturing method.
 - d) Explain high frequency heat sealing method for thermoplastics.
 - e) Explain the methods of applying adhesive in meter-mix-disperse.

5. Attempt any TWO of the following:**12**

- a) Explain with neat figure the threading technique for given plastic.
- b) Describe solvent cementing procedure for cellulosic plastics and nylon.
- c) Explain with neat figure the embossing method on thermoplastic.

6. Attempt any TWO of the following:**12**

- a) Explain ultrasonic welding technique with neat figure.
 - b) Explain with neat figure the electrolytic plating metallization of plastic.
 - c) Classify powder coating types and state applications of any two.
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