

22452

22223

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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: **10****
- a) Enlist any four types of adhesive.
 - b) identify sealing method use for
 - i) Milk pouch
 - ii) Plastic folder
 - c) Suggest printing method for
 - i) Bottle cap
 - ii) Oil pouch
 - d) State any two applications of in-mould decorating.
 - e) Enlist any two metallization techniques used with plastics.
 - f) State any four plastics used as powder coating material.
 - g) State any two applications of powder coating.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Elaborate filing as a method of finishing plastics.
 - b) Describe roll coater as a method of adhesive application.
 - c) If PVC conduit pipes are to be joined suggest the method for same and explain it.
 - d) Elaborate shrink fitting and snap fitting with plastic parts.
- 3. Attempt any THREE of the following:** **12**
- a) State principal consideration and used guidelines for machining tool geometry.
 - b) Draw neat sketches of any four types of adhesive joints.
 - c) Identify and explain the welding method used for making LED bulb assembly.
 - d) Suggest and explain the joining method and material if a plastic lunch box having integral lid is to be made.
- 4. Attempt any THREE of the following:** **12**
- a) Elaborate the resins used in adhesive bonding.
 - b) Suggest and explain the method for temporary joining plastic parts.
 - c) If PE film is be used for making shopping bags needs to be printed suggest and explain suitable surface pretreatment method for it.
 - d) Suggest and explain decorating method for golden text matter on coasters.
 - e) Describe solution method for a powder coating manufacturing.
- 5. Attempt any TWO of the following:** **12**
- a) Describe drilling and laser machining with plastics.
 - b) Explain construction and working of jaw type sealer used for thermal sealing of plastic film with neat sketch.
 - c) Explain screen printing of flat and cylindrical plastic parts with neat sketch.

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[3]

Marks

6. Attempt any TWO of the following:

12

- a) State characteristics and applications of any three types of adhesives.
 - b) Identify and explain the decorating method used to impart important textile and metallic finish to plastic.
 - c) Explain any two methods of powder coating application.
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