GUJARAT TECHNOLOGICAL UNIVERSITY Diploma Engineering - SEMESTER-III • EXAMINATION – WINTER 2013

| Subject Code: 332303 Date: 02-12-20 | | | 13 | |
|-------------------------------------|--|--|----|--|
| Subje Time | Subject Name: Design Fundamentals of MouldsTime: 02:30 pm - 05:00 pmTotal Marks: 70Instructions: | | | |
| Instru | 1. Att 2. Ma 3. Fig 4. Eng | empt all questions. ke suitable assumptions wherever necessary. ures to the right indicate full marks. glish version is considered to be Authentic. | | |
| Q.1 | (a) | Design and draw sectional elevation and plan view of hand injection mold for a hollow cylinder type product. Assume suitable dimensions. | 14 | |
| Q.2 | | | | |
| | (a) | Define parting surface. List various types of parting surfaces. Sketch | 07 | |
| | (b) | List any seven elements of machine injection mold. Give function of each element. | 07 | |
| | | OR | • | |
| 0.3 | (b) | Differentiate integer method and insert-bolster method. | 07 | |
| Q.C | (a) | Give function of guide pillar and guide bush. Sketch guide pillar and guide bush design. | 07 | |
| | (b) | Explain positioning of gate with neat sketches. OR | 07 | |
| Q.3 | (a) | Sketch sprue gate or fan gate. Also give its applications, advantages and disadvantages | 07 | |
| | (b) | Explain balancing of runner with neat sketch. | 07 | |
| 0.4 | | | | |
| ~ ·· | (a) | Sketch ejector plate assembly. Label all the parts. | 07 | |
| | (b) | List various ejection elements. Sketch any three of them. OR | 07 | |
| Q. 4 | (a) | Explain push back pin ejector assembly return system with neat sketch. | 07 | |
| | (b) | Explain stripper plate ejection system with neat sketch | 07 | |
| 05 | | | | |
| ~~~ | (a) | Define runner efficiency. Sketch various runner profiles. | 07 | |
| | (b) | Sketch any one type of core insert cooling system. | 07 | |
| 05 | (a) | UK Sketch any one type of integer core plate cooling system | 07 | |
| ~~ | (b) | Sketch any one type of integer cavity plate cooling system. | 07 | |
