

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER- IV EXAMINATION –Summer- 2019

Subject Code: 3342304**Date: 20-05-2019****Subject Name: Plastics Extrusion Technology****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

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|------------|---|-----------|
| Q.1 | Answer any seven out of ten. | 14 |
| | <ol style="list-style-type: none"> 1. Give trouble shooting for any two defects in pipe extrusion. 2. Write any four specifications of extruder machine. 3. List various cooling systems for barrel. 4. Define : L/D ratio, Helix angle 5. What is the function of thrust bearing? 6. List various process variables of extrusion process. 7. List various auxiliary equipments used in extrusion. 8. List various products produced by extrusion process. 9. Give trouble shooting for any two defects in film extrusion. 10. List various parts of an extruder. | |
| Q.2 | (a) Give differences: Dry extrusion process and Wet extrusion process. | 07 |
| | OR | |
| | (a) Explain various process variables in extrusion process. | 07 |
| | (b) Explain wire coating process with line diagram. | 07 |
| | OR | |
| | (b) List various heating systems of barrel. Explain any one of them. | 07 |
| Q.3 | (a) Short note on oscillating haul off. | 07 |
| | OR | |
| | (a) Write short note on “automatic feeding”. | 07 |
| | (b) Draw line diagram of blown film plant. | 07 |
| | OR | |
| | (b) Write short note on “automatic screen”. | 07 |
| Q.4 | (a) Write material selection criteria for extrusion process. | 07 |
| | OR | |
| | (a) Write functions of screen pack and breaker plate. | 07 |
| | (b) Explain manufacturing process of sheet with line diagram. | 07 |
| Q.5 | (a) Draw a neat sketch of single screw extruder. Label all the parts. | 07 |
| | (b) Explain start-up procedure of an extruder. | 07 |
