

Seat No.: _____

Enrolment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – III EXAMINATION – SUMMER 2016

Subject Code: 332302

Date: 17-05 -2016

Subject Name: Fundamentals of Fabrication Technology

Time:02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

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|------------|---|-----------|
| Q.1 | (a) Define engineering materials and explain its importance. | 07 |
| | (b) Describe constructional details of lathe machine. | 07 |
| Q.2 | (a) Write short note on Annealing process. | 07 |
| | (b) Explain properties of engineering materials. | 07 |
| | OR | |
| | (b) List the types of ferrous metal and explain wrought iron. | 07 |
| Q.3 | (a) Explain with examples how additives affect the properties of steel. | 07 |
| | (b) Differentiate metallic materials from non metallic materials. | 07 |
| | OR | |
| Q.3 | (a) List the types of cutting tools and write its applications. | 07 |
| | (b) Write short note: "Tool Life" | 07 |
| Q.4 | (a) Give the name of cutting fluids and explain its importance. | 07 |
| | (b) Explain working principle of shaping machine. | 07 |
| | OR | |
| Q.4 | (a) Draw vertical milling machine and label all parts. | 07 |
| | (b) Write short note: "Polishing" | 07 |
| Q.5 | (a) List the types of grinding machine and explain any one. | 07 |
| | (b) Explain Nitriding as a heat treatment process. | 07 |
| | OR | |
| Q.5 | (a) Explain metal specifications. | 07 |
| | (b) Discuss the criteria of metal selection for mold. | 07 |
