

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-III • EXAMINATION – SUMMER • 2014

Subject Code: 133404**Date: 30-05-2014****Subject Name: Basic Manufacturing Processes****Time: 02.30 pm - 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.

- Q.1** (a) Explain the working principle of lathe with neat sketch. 07
(b) What are the operations can be performed on a lathe machine? Explain. 07
- Q.2** (a) Define speed, feed and depth of cut and explain how to calculate these for lathe machine. 07
(b) Write about lathe accessories and attachments. 07
- OR**
- (b) Explain the types of planers with neat block diagrams. 07
- Q.3** (a) Explain any one shaper mechanism with neat sketch. 07
(b) Explain twist drill nomenclature. 07
- OR**
- Q.3** (a) What are the different tool holding devices in drilling machine? 07
(b) Explain various slotter operations with sketches. 07
- Q.4** (a) Write briefly about gang, form and profile milling. 07
(b) What are the work holding devices used on milling machine? Explain. 07
- OR**
- Q.4** (a) Explain different types of standard milling cutters with sketches. 07
(b) Write about the principle parts of column and knee type milling machine. 07
- Q.5** (a) Discuss the classification of grinding process. 07
(b) Write about grit, grade and structure of grinding wheels. 07
- OR**
- Q.5** (a) Explain the tool and cutter grinder working principle with suitable sketch. 07
(b) Explain the grinding wheel standard marking system with an example. 07
