

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-III EXAMINATION – WINTER 2015**

**Subject Code:133404****Date:29/12/2015****Subject Name: Basic Manufacturing Processes****Time: 2:30pm to 5:00pm****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 classification of manufacturing processes. **07**  
(b) Explain the lathe operations with neat sketches. **07**
- Q.2** (a) Explain different taper turning methods with neat sketches. **07**  
(b) Explain the working principle of shaper with neat sketch. **07**
- OR**
- (b) Differentiate shaper, planer and slotter. **07**
- Q.3** (a) Explain any one quick return mechanism with neat sketch. **07**  
(b) Explain the classification of drilling machine. **07**
- OR**
- Q.3** (a) Explain the twist drill nomenclature with neat sketch. **07**  
(b) Explain radial drilling machine with neat sketch. **07**
- Q.4** (a) Explain the types of milling machine. **07**  
(b) Explain the types of milling cutters with neat sketches. **07**
- OR**
- Q.4** (a) Explain the work holding devices for milling. **07**  
(b) Explain various milling operations. **07**
- Q.5** (a) Explain surface grinding machine with neat sketch. **07**  
(b) Explain tool and cutter grinder with neat sketch. **07**
- OR**
- Q.5** (a) Explain the types of cylindrical grinding. **07**  
(b) Write about grinding wheel mounting and maintenance. **07**

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