

**B.Tech. MECHANICAL ENGINEERING  
(BTMEVI)**

**Term-End Examination**

**June, 2012**

**BIME-014 : PRODUCTION TECHNOLOGY - II**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note: Answer any five questions only. Assume suitable data if any missing.*

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1. (a) Describe a suitable method of feeding the bar stock on Capstan and turret lathes. 7
- (b) How is a lathe specified ? Explain with a neat sketch the relevance of each of the specification points. 7
2. (a) What is meant by the terms 'drilling' and 'boring' ? How do they differ from each other ? 7
- (b) Describe the main constructional features of a horizontal boring machine. 7
3. (a) Explain with the help of a neat sketch, the working principle of a shaper. 7
- (b) What are the different devices used for driving the table of a planer ? Explain one of them. 7

4. (a) Explain two milling operations with neat sketches. 7  
(b) Describe the 'Indian standards' method of specifying a grinding wheel. 7
5. (a) Draw a fig of an internal pull type broach and indicate the various terms relative to its teeth. 7  
(b) Explain the various elements of hob with the help of neat sketch. 7
6. (a) Describe the working principle of NC machine with the help of a block diagram 7  
(b) List the common part programming languages. Describe any one of them in brief. 7
7. (a) Explain the 'point-to-point' and straight line system of tool positioning in NC machine. 7  
(b) What are turning centres ? Briefly describe the CNC Turning Centre. 7
8. Write short notes on *any four* of the following :  
(a) Collect Chuck 3½x4=14  
(b) Up milling and Down milling  
(c) Shaping operations  
(d) Constant load per tooth in Broaching  
(e) DNC machine  
(f) Interpolation.
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