

**DIPLOMA – VIEP – MECHANICAL  
ENGINEERING (DMEVI)**

00298

**Term-End Examination**

**December, 2016**

**BIME-033(S) : MACHINE TOOLS**

*Time : 2 hours*

*Maximum Marks : 70*

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*Note : Answer any five questions. All questions carry equal marks.*

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1. (a) How are lathe machines classified ? Write the difference between Capstan and Turret lathe. 7
- (b) Distinguish between single-point and multi-point cutting tools. Give the names of different tools that are used on a lathe machine. 7
2. (a) Explain about the classification of 'locating surfaces' on a lathe machine. 7
- (b) What are the safety guidelines and precautions to be followed while working on a lathe machine ? 7
3. (a) Describe the working of a radial drilling machine with a neat diagram. 7
- (b) What are the different abrasives used in making grinding wheels ? Explain them. 7

4. (a) What are the different operations performed on a drilling machine ? Discuss any one of them. 7
- (b) Explain the process of 'Deep Hole' boring, with its applications. 7
5. (a) Write about the classification of milling machines and briefly explain how profile milling machine works. 7
- (b) What are the different types of milling methods ? Explain any one of them. 7
6. (a) What are the common work holding devices used on milling machines ? Explain any one of them with a neat sketch. 7
- (b) Explain briefly the main elements of a broaching tool with the help of a neat sketch. 7
7. (a) Explain the difference between pull broaching and push broaching. 7
- (b) Explain briefly the 'honing process'. Give an example of honing work. 7
8. (a) What are the advantages of grinding process over other cutting processes ? Enumerate the special features of grinding process. 7
- (b) Discuss the various advantages of CNC machines over conventional machines. 7
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