

**DIPLOMA - VIEP - MECHANICAL
ENGINEERING
III SEM**

Term-End Examination

June, 2012

BME-059 : MANUFACTURING PROCESS - III

Time : 2 hours

Maximum Marks : 70

Note : *Answer any five questions.*

1. (a) Explain the working of horizontal and coloumn type milling machine with neat sketch. 7
- (b) How the milling cutters are classified ? 7
Explain with neat sketches the various types of cutters used on milling machine.
2. (a) Explain the effect of cutting speed, feed and depth of cut on the finish obtainable on a milling machine with suitable examples. 7
- (b) Explain the working of horizontal broaching machine with neat sketch. 7
3. (a) What are the types of presses ? Explain the working of mechanical press with neat sketch. 7
- (b) What is high speed presses ? List out the various application of press. 7

4. (a) What is meant by Tigs and fixtures ? List out their uses and applications in manufacturing industries. 7
- (b) What are the types of clamps ? Explain any one type with neat sketch. 7
5. (a) Explain the process of Electric Chemical Machining (ECM) with neat sketch and state its application. 7
- (b) Explain the process of ultrasonic machine with neat sketch and state its application. 7
6. (a) Explain the working principle of Gear Hobbing machine with neat sketch. 7
- (b) Describe about the Gear finishing operation with suitable examples. 7
7. (a) Explain the working of injection moulding machine with neat sketch. 7
- (b) What are the different types of plastics ? List out their properties. 7
8. Write short notes on the following : **4x3.5=14**
- (a) Gear shaping cutters
- (b) Plasma arc machining
- (c) Locating devices
- (d) Die clearance
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