

**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

00293

December, 2018

BME-059 : MANUFACTURING PROCESS – III

Time : 2 hours

Maximum Marks : 70

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

1. (a) What is the difference between jigs and fixtures ? Also discuss the economic aspects of the use of jigs and fixtures. 7
- (b) Explain the set-up and working of an end milling machine. 7
2. (a) Discuss the various gear manufacturing processes. Explain in detail any one gear finishing operation. 7
- (b) Explain the working of electric discharge machining process. Give its applications. 7
3. (a) With the help of neat sketch, explain pull-broach. 7
- (b) Differentiate between thermosetting plastics and thermoplastics. 7

4. (a) With the help of a neat sketch, explain the working of PLASMA arc machining. 7
- (b) Explain the various factors to be considered in selection of a broaching tool. 7
5. (a) Describe electron beam machining process with relevant sketches. Give its applications. 7
- (b) Explain the working of electrochemical machine with the help of neat sketches. 7
6. (a) Describe the various types of cutters used in gear shaping. 7
- (b) Discuss in detail the advantages of honing and lapping. Give the applications of these processes. 7
7. (a) With a neat sketch, briefly explain the process of water jet machining. 7
- (b) Explain the working principle of Ion Beam machining with the help of a neat sketch. 7
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