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BME-059

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DIPLOMA - VIEP - MECHANICAL ENGINEERING III SEM

Term-End Examination

June, 2011

BME-059 : MANUFACTURING PROCESS - III

Time : 2 hours *Maximum Marks : 70*

Note : *Answer **any seven** questions.*

1. (a) Explain the working of universal milling machine with neat sketch. 5

   (b) Differentiate the process of up milling and down milling with suitable illustrations. 5

2. (a) How the milling cutters are classified ? Explain with neat sketches the various types of milling cutters. 5

   (b) Differentiate between internal broaching and surface broaching. 5

3. (a) Explain the working of vertical broaching machine with neat sketch. 5

   (b) What is a die ? What are its uses ? Describe with a neat sketch with working of commonly used dies. 5

4. (a) What are the types of presses ? Explain any one with neat sketch. 5

(b) What is meant by Jigs and Fixtures ? What are their application in industry ? 5

5. (a) What is principle of location ? How the locating devices are used in Jig and Fixtures ? Explain. 5

(b) What are the types of welding fixtures ? Explain with neat sketch. 5

6. (a) Explain the process of Electro Discharge Machining (EDM) with neat sketch and state its application. 5

(b) Explain the process of chemical machining. State its application. 5

7. (a) Explain the working principle of plasma arc machining. State its advantages and disadvantages. 5

(b) Compare the shapping and template process of gear generation. 5

8. (a) Explain the working principle of gear shapping machine with neat sketch. 5

(b) Describe about the gear finishing operations. 5

9. (a) Explain the working principle of compression moulding machine with neat sketch. 5

(b) Discuss the merits and limitations in the application of plastics. 5

10. Write short notes on *any two* of the following : 5+5

(a) Universal Dividing Head

(b) Stripper plates

(c) Gear tooth Elements