## DIPLOMA IN MECHANICAL ENGINEERING (DME)

## Term-End Examination, 2019

BME-059: MANUFACTURING PROCESS-III

Time: 2 Hours Maximum Marks: 70

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

- (a) How milling cutters are classified? With the help of neat sketch explain various types of cutters used on milling machines. [7]
  - (b) Classify different types of milling machines.

    Explain any one milling machine with the help of neat diagram.

    [7]
- (a) Explain with the help of neat diagram the working of horizontal broaching machine. Also mention its applications, advantages and disadvantages.

[7]

(b)	Explain the working of Internal broaching a	and
	External broaching machines. Also state	the
	limitations of these two types.	[7]

- (a) Classify different types of press. With the help of neat diagram, explain the working principle of any one press.
  - (b) What is a die? What are its uses? Describe with the help of neat diagram the working of commonly used dies. [7]
- (a) Discuss the function of jigs and fixture. Explain with the help of suitable examples. [7]
  - (b) With the help of neat diagram, explain the working principle of flat face and inclined face punch. [7]
- (a) With the help of neat diagram, explain the working principle of Electro discharge machine (EDM).
   Also state its applications, advantages and disadvantages.
  - (b) With the help of neat diagram, explain the working principle of ultrasonic machine (USM). Also state its application, advantages and disadvantages.

[7]

- 6. (a) What are the methods for Gear finishing operations? Explain any one in detail with the help of a diagram.
  - (b) Differentiate between the Injection moulding and Compound moulding. Also state the limitations of these types of moulding. [7]
- 7. Write short notes on the following: [2×7=14]
  - (i) Plasma Arc Machining
  - (ii) Compression moulding.

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