

Roll No

AU/ME-801(B)**B.E. VIII Semester**

Examination, June 2017

Tool Design and Machine Tools

(Elective - III)

Time : Three Hours

Maximum Marks : 70

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

1. a) What are the elements of machine tool.
b) Give the comparison between turret and centre lathe.
2. a) Discuss various types of structures of machine tools.
b) Differentiate between gear hobbing and gear shaping.
3. a) Discuss low speed, feed and power requirements are chosen for a proposed machine tool.
b) What do you understand by geometrical progression. Explain the advantages of geometrical progression in selection of speed of drives.
4. a) What is the difference between hammer forging and drop forging.
b) Discuss various types of dies used in metal forming.

5. a) Explain what happens when metal is cold worked.
b) Describe the operation of three high roll mill.
6. a) Differentiate between jig and fixture.
b) Explain the following locating device
i) Cylindrical locaters
ii) Conical locaters
7. a) Discuss the design features of thread snap gauges.
b) What is flow molding? Explain.
8. Write short notes on any two.
i) Design features of forging die
ii) Electrical drives
iii) Principles of location
