

**1054****Code : 15ME43T****Register  
Number**

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**IV Semester Diploma Examination, Oct./Nov.-2019****MACHINE TOOL TECHNOLOGY****Time : 3 Hours ]****[ Max. Marks : 100**

- Note :** (i) Answer any **six** questions from Part – A.  
(ii) Answer any **seven** questions from Part – B.

**PART – A**

1. List the factors affecting tool life. 5
2. Name the various operations performed in Lathe. 5
3. Differentiate Capstan and Turret Lathe. 5
4. Mention the specification of a Shaper. 5
5. List the various operations performed in planer. 5
6. Differentiate between Jigs and Fixtures. 5
7. Classify Milling Cutters. 5
8. Explain lapping process. 5
9. Describe briefly the principle of Laser Beam Machining. (LBM) 5

**PART – B**

10. (a) Explain briefly the different types of chips. 5  
(b) State the difference between orthogonal and oblique cutting. 5

11. (a) Explain 3 Jaw chuck with a neat sketch. 5  
(b) Explain thread cutting operation with sketch in a lathe. 5
12. Sketch and explain the working of multiple spindle automatic lathe. 10
13. Sketch and explain the working of Slotter. 10
14. (a) Differentiate between Shaper & Planer. 6  
(b) List the operations performed on a shaper. 4
15. What is indexing ? Explain simple and compound indexing. 10
16. Explain radial drilling machine with a sketch. 10
17. Sketch and explain the centreless Grinding. 10
18. Explain with a neat sketch the principle of working of Abrasive Jet Machining (AJM) 10
19. (a) Differentiate up milling and down milling operations with a sketch. 6  
(b) State any four (4) Milling Operations. 4
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