

# TDM41 - Toolroom Special Machines

375

REG. NO

OCTOBER 2021

Time: Three hours

Maximum Marks: 75

- Note:
1. Answer ALL the questions in PART-A (1 mark each)
  2. Answer any ONE question from each unit in PART-B (3 marks each)
  3. Answer any ONE question from each unit in PART-C (10 marks each)
  4. The question paper contains TWO Pages

## PART-A (1x10=10)

1. List the various types of cutting tools.
2. Define. Cutting fluids.
3. What are the types of boring machine.?
4. Define Clearance.
5. What are the types of milling machine?
6. What are types of Gear finishing process?
7. Define Grinding.
8. What are types of Grinding wheels?
9. Give the Expansion of Laser.
10. Give advantages of EDM process.

## PART-B (3x5=15)

### UNIT-I

11. What are the types of tool dynamometer?
12. What are the factors influencing the tool life.

### UNIT-II

13. What is the specialty of fine boring machine?
14. Define Grinding wheels.

### UNIT-III

15. Explain principle and operation of milling machine.
16. What is Gear Generating process? List them.

### UNIT-IV

17. Define specification for Grinding machines.
18. Define wheel selection in Jig Grinder.

### UNIT-V

19. List out the applications of ultrasonic machining.
20. Define masking in chemical machining.

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PART-C (10x5=50)

UNIT-I

21. Explain with neat sketch the oblique cutting.
22. Explain any one type of tool dynamometer with neat sketch.

UNIT-II

23. Sketch and explain the Horizontal Boring machine.
24. Explain with neat sketch the universal tool and cutting grinder.

UNIT-III

25. Explain with neat sketch of about universal milling machine.
26. Explain Gear burnishing process with suitable diagram.

UNIT-IV

27. Sketch and describe the method of dressing and ~~truing~~ truing of a Grinding wheel.
28. Define Abrasive process, types of Grinding and classification of Grinding machine and explain the operation of Grinding process.

UNIT-V

29. Explain Plasma Arc machining with a neat sketch.
30. Explain construction and working of EDM spark Erosion.

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