

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. Mention any two types of taper turning in a lathe.
2. List out any two types of Planer machine.
3. What is tapping?
4. Mention any two work holding device of a milling machine.
5. State the various grades of a grinding wheel.
6. What is progressive broaching?
7. What is plasma?
8. Mention the method of metal removal in laser beam machining process.
9. Give the uses of interferometer.
10. What is lead in threads?

PART-B (3x5=15)

UNIT-I

11. What are the functions of a tail stock?
12. Classify shapers.

UNIT-II

13. Differentiate boring and reaming.
14. How will you classify a milling machine?

UNIT-III

15. What do you mean by glazing of grinding wheel?
16. List any three applications of internal broaching.

UNIT-IV

17. Give some applications of LBM.
18. What are the merits of Unconventional machining process over conventional machining process.

UNIT-V

19. What are the applications of autocollimator?
20. Name some instruments used for measuring angles.

UNIT-I

21. Explain with neat sketches the process of
 - (a) Knurling
 - (b) Drilling in a Lathe
22. Describe with aid of a simple sketch the hydraulic quick return mechanism of a shaper.

UNIT-II

23. With neat sketches explain the nomenclature of a twist drill.
24. List out the various operations that can be performed in a milling machine and explain any two with neat sketches.

UNIT-III

25.
 - (a) Explain the term grit, grade and structure of grinding wheel (6)
 - (b) Sketch a vertical boring machine and mention the parts. (4)
26.
 - (a) Mention the different methods of locating a hole in jig boring machine. Explain any one. (6)
 - (b) List out the criteria for selecting grinding wheel. (4)

UNIT-IV

27. Describe the Electric discharge machining process. Give its applications.
28. Explain with a neat sketch the Plasma arc machining process.

UNIT-V

29. What is an autocollimator? Explain its principle and working with a neat sketch.
30. What is bevel protractor? Explain with a neat sketch.
