



C14-M-506

4647

**BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DME-FIFTH SEMESTER EXAMINATION**

MACHINE TOOL ENGINEERING

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

- Instructions :**
1. Answer **All** questions.
 2. Each question carries **THREE** marks
 3. Answer should be brief and straight to the point

1. State advantages of non-conventional machining over conventional machining.
2. Write any three advantages of laser beam machining.
3. State the principle of chemical machining.
4. List out any six engineering applications plastics.
5. What is calendaring of plastics?
6. Distinguish between blanking and punching.
7. State the functions of drill bush.
8. Differentiate between jigs and fixtures.
9. List out various types of clamps.
10. Mention the methods for locating the positions of hole used on jig boring machine.

PART-B

10X5=50

Instructions :

1. Answer any **five** questions.
2. Each question carries **ten** marks.
3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain the operation of electric discharge machining (EDM) with neat sketch. State its advantages and disadvantages.
12. Explain the abrasive jet machining with a sketch. State its advantages and disadvantages.
13. Explain moulding press with a neat sketch and its applications.
14. Explain direct blow moulding in fabrication of plastics with a neat sketch.
15. Explain simple cutting die set assembly and label the parts.
16. Explain the different types of press tool shaping operations.
17. Explain leaf jig with a diagram.
18. Draw cross-rail jig boring machine and explain its working.
