



C14-M-306

4254

BOARD DIPLOMA EXAMINATION, (C-14)
SEPTEMBER/OCTOBER - 2020
DME—THIRD SEMESTER EXAMINATION
PRODUCTION TECHNOLOGY—I

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. How the size of engine lathe is specified?
2. List out six work holding devices used on engine lathe.
3. State the advantages of production lathes.
4. State the function of shaper. How the shaper is specified?
5. List six work holding devices used in slotting machine.
6. State the function of planer. How the planer is specified?
7. State the difference between a coolant and a lubricant.

- * 8. List six defects in welding.
9. State the differences between soldering and brazing.
10. List out the equipment required for arc welding.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain any two methods of taper turning with neat sketches. 5+5
12. Explain the functions of main parts of a Capstan lathe with a neat sketch.
13. Explain the functions of main parts of a standard planer with a neat sketch.
14. Explain the crank and slotted lever mechanism of a shaper with a neat sketch.
15. Explain with a line diagram the working of a vertical broaching machine.
16. (a) Write five important properties of cutting fluids. 5
(b) Write short notes on (i) soluble oils and (ii) solid lubricants. 5
- * 17. Explain the working of atomic hydrogen welding with a neat sketch. State its advantages and limitations. 6+2+2
18. Explain the working of ultrasonic welding with a neat sketch. State its advantages and limitations. 6+2+2
