

6245

BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—2023

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. State the working principle of a lathe.
2. List out the accessories used on engine lathe.
3. State the need of a copying lathe.
4. Explain the working principle of a shaper.
5. State main differences between shaper and planner.
6. Write any three factors to be considered while selecting the cutting fluids.
7. List out any three advantages and limitations of welding over other fastening methods.
8. State the difference between straight and reverse polarities.
9. What are the applications of autocollimator?
10. What is a slip gauge? State its applications.

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PART—B

10×5=50

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

11. Explain the procedure for thread cutting on engine lathe with the help of neat sketch.
12. Draw a line diagram of Capstan lathe and describe the functions of its main parts.
13. Draw a line diagram of shaper and explain its parts.
14. Explain the rotary continuous broaching machine with a line diagram.
15. Describe the properties of lubricants.
16. Explain the working principle of MIG welding with a neat sketch.
17. With the help of diagram, explain the principle of oxy-acetylene flame cutting.
18. Describe the working principle of a pneumatic comparator with a neat sketch.

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