



C09-M-306

3250

**BOARD DIPLOMA EXAMINATION, (C-09)
OCT / NOV– 2015
DME - THIRD SEMESTER EXAMINATION
MANUFACTURING TECHNOLOGY – I**

Time : 3 hours]

[Total Marks : 80

PART – A

3 X 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. What is the function of lathe?
2. What are lathe accessories used in engine lathe?
3. List three different methods of taper turning.
4. Explain the working principle of shaper.
5. What is broaching? How is it done?
6. What are the types of lubricants?
7. What is the difference between the pressure welding and fusion welding?
8. State the advantages of ultrasonic welding.
9. List the types of mechanical comparators.
10. State the working principle of an optical flat.

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* **PART - B**

10 X 5 = 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. Draw the line diagram of engine lathe and describe the functions of main parts.
12. Explain common tool holding and work holding devices on turret lathe.
13. *a)* Write any five advantages of capstan lathe.
b) Explain the working principle of planer with neat sketch.
14. Explain the principle of Whitworth quick return mechanism of shaper.
15. *a)* Write short note on Horizontal continuous Broaching machine with a line diagram.
b) Explain the methods of application of cutting fluids.
16. *a)* Explain with neat sketch the principle of arc welding.
b) Explain with neat sketch the left-ward gas welding technique.
17. With the help of line diagram explain the principle of Oxy-Acetylene flame welding.
18. Draw a neat sketch of profilometer and explain its working.

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