



C09-M-306

**3250**

**BOARD DIPLOMA EXAMINATION, (C-09)**  
**OCT/NOV—2013**  
**DME—THIRD SEMESTER EXAMINATION**  
**MANUFACTURING TECHNOLOGY—I**

*Time : 3 hours ]*

*[ Total Marks : 80*

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**PART—A**

**Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.

1. What are different types of lathe?
2. What is knurling and what is its purpose?
3. Give any three differences between turret lathe and central lathe.
4. How are shapers classified?
5. Write any six advantages of broaching machine.
6. What are pressure welding and fusion welding?

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7. Mention the advantages of gas welding.
8. What are the methods of application of cutting fluids?
9. List out different instruments used for plane surface measurement.
10. Write any three types of comparator.

**PART—B**

**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. Draw a line diagram of engine lathe and describe the functions of its main parts.
12. Explain different work-holding devices on turret lathe.
13. (a) Write short notes on semi-automatic lathe and automatic lathe.  
(b) Mention any five advantages of hydraulic shaper.
14. Draw a neat sketch of standard double-housing planner and explain its main parts.

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- 15.** (a) Draw a neat sketch of horizontal broaching machine and list out its different parts.  
(b) What are different types of lubricant? Give example of each.
- 16.** Explain the principle of arc welding with a neat sketch and list out different equipments and accessories used in it.
- 17.** With a neat diagram, explain the procedure of ultrasonic welding and write the advantages.
- 18.** With the aid of diagram, explain the principle of operation of interferometer.

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