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Hall Ticket/Pin :

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C14-M-306

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BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2016

DME—THIRD SEMESTER EXAMINATION

MANUFACTURING 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 lathe.
2. What is the difference between live centre and dead centre?
3. What is the difference between semi-automatic lathe and automatic lathe?
4. State the main difference between shaper and planer.
5. How planer size is specified?
6. What are the operations performed on a slotter?
7. What are the types of lubricants?
8. Mention the advantages of gas welding.

9. List any three limitations of arc welding.
10. What are the functions of flux used in soldering?

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. Draw a line diagram of capstan lathe and describe the functions of its main parts.
12. List different methods of taper turning and explain taper turning by the compound rest method.
13. Draw a line diagram of standard shaper. Label and explain the parts.
14. What are the quick return mechanisms employed for slotter? Explain the Whitworth quick return mechanism in slotter with neat sketch.
15. List out various types of broaching machines and explain the horizontal broaching machine with neat sketch.
16. Explain the methods of application of cutting fluids.
17. What is non-destructive testing of welds? Explain about visual examination and radiography testing of welds.
18. Explain the principle of atomic hydrogen welding with a neat sketch. State its advantages and limitations.
