C16-**M-304**

6245

BOARD DIPLOMA EXAMINATIONS

SEPTEMBER/OCTOBER - 2020

DME – THIRD SEMESTER

PRODUCTION TECHNOLOGY-I

Time: 3 hours Max. Marks: 80

PART – A **3 X 10 = 30**

Instructions: *1. Answer **all** questions.*
*2. Each question carries **Three** Marks.*
3. Answer should be brief and straight to the point and should not exceed Five simple sentences.

1. State the working principle of a lathe.
2. What is Knurling? What is it purpose?
3. Write any three differences between Capstan and Turret Lathes.
4. How shapers are classified?
5. List out the quick return mechanisms used in a planar.
6. What is a cutting fluid? State primary function of a cutting fluid?
7. State the functions of coated electrodes in arc welding.
8. List out different tools and equipment of Arc Welding.
9. What is Optical Comparator and State its uses?
10. Write any three types of Comparators.

[Cont..,

PART – B 5 X 10 = 50

***Instructions**:* *1. Answer any **Five** questions*
*2. Each question carries **TEN** Marks.*
3. Answer should be comprehensive and a criterion for valuation is the content but not the length of the answer.

11. Explain the Tail Stock Set-over method of taper turning by using a Lathe with a neat sketch.

12. Differentiate Automatic and Semi-automatic Lathes.

13. Draw the line diagram of double housing planer label its parts and explain construction details of table and bed only.

14. Explain the continuous broaching machine with a line diagram.

15. Explain different types of Lubricants.

16. Explain the working principle of TIG welding with a neat sketch. State its advantages and Limitations.

17. Explain Oxy-Acetylene gas Welding with a neat sketch. State its advantages and disadvantages.

18. Describe the working principle of optical comparator with a neat sketch.

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