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со9-м-306

# 3250

## **BOARD DIPLOMA EXAMINATION, (C-09)**

#### MARCH/APRIL—2021

## DME - THIRD SEMESTER EXAMINATION

MANUFACTURING TECHNOLOGY - I

Time: 3 hours ]

[ Total Marks: 80

 $4 \times 5 = 20$ 

## PART—A

Instructions: (1) Answer any five questions.

- (2) Each question carries four marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** Write two specifications of the lathe machine.
- **2.** Write classification of lathes.
- **3.** List four parts of a lathe machine.
- 4. State the working principle of a shaper.
- 5. Define the term Broaching.
- 6. State the purpose of lubricants.
- 7. List four defects in welding process.
- 8. List four tools and equipment of arc welding.
- 9. List out the measuring devices used in angular measurements.
- **10.** List different types of mechanical comparators.

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**Instructions :** (1) Answer *any* **four** questions.

- (2) Each question carries fifteen marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** Explain the working principle of Turret lathe with a neat sketch.
- **12.** List out various methods of taper turning and explain any one method of taper turning.
- **13.** (a) List five operations performed on lathe machines.
  - (b) Draw a neat sketch of slotter and label the parts.
- 14. Explain the constructional details of planer with a neat sketch.
- **15.** (a) Draw the line diagram of vertical broaching machine and label the parts.
  - (b) List five properties of lubricants and coolants.
- 16. Explain the principle of gas welding with a neat sketch.
- 17. Explain submerged arc welding with a neat sketch.
- **18.** Explain the working of any one type of mechanical comparator with a sketch.

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