

C14-M-RAC-306

4254

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2021

DME - THIRD SEMESTER EXAMINATION

PRODUCTION TECHNOLOGY - I

Time: 3 hours [Total Marks: 80

PART—A

 $4 \times 5 = 20$

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. How is the size of engine lathe specified?
- 2. List out six work holding devices used in engine lathe.
- 3. Differentiate between live centre and dead centre.
- **4.** Write the basic operations done on the shaper.
- **5.** Draw a line diagram of slotter machine.
- **6.** List out various types of planers.
- **7.** List out the application of cutting fluids.
- **8.** Write the classification of welding.
- **9.** Write the differences between soldering and brazing.
- **10**. What are various defects in welding?

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.** Draw a line diagram of engine lathe, indicate the main parts on it and explain them.
- **12.** List different methods of taper turning and explain any two methods of taper turning.
- **13.** Draw a line diagram of shaper, indicate the main parts on it and explain them.
- **14.** Explain the hydraulic system for quick return mechanism of slotter with neat sketch.
- **15**. (a) Explain the rotary table and continuous broaching machines with a line diagram.
 - (b) Draw a neat sketch of internal pull broach and label its parts.
- 16. Explain different types of lubricant with examples.
- 17. Explain the submerged arc welding with the help of neat sketch. Write the advantages and limitations of it.
- **18.** Explain the principle of gas welding with neat sketch and list out different equipments and accessories used in gas welding.

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