

6245

BOARD DIPLOMA EXAMINATION, (C-16) JANUARY/FEBRUARY—2022

DME - THIRD SEMESTER EXAMINATION

PRODUCTION TECHNOLOGY - I

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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. List out different work holding devices used in engine lathe.
- 2. List three different methods of taper turning.
- **3.** Give the advantages of capstan lathe over centre lathe.
- **4.** State the main differences between shaper and planer.
- **5.** What is the function of slotter? How the size of slotter is specified?
- **6.** What are the types of lubricants?
- **7.** State the advantages of ultrasonic welding
- **8.** State the differences between Soldering and Brazing.
- **9.** What is a comparator? How they are classified?
- **10.** List out the instruments for angular measurement

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

- (2) Each question carries ten 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 and describe the functions of main parts.
- **12.** Describe the working principle of semi automatic lathe with a neat sketch.
- **13.** Draw a neat sketch of planner and explain the parts.
- **14.** Draw a neat sketch of horizontal broaching machine and explain its working.
- **15.** Explain different methods of applications of cutting fluids.
- **16.** Explain the principle of gas welding and list out the equipment used in oxy-acetylene gas welding.
- **17.** Explain the principle of TIG welding with a neat sketch and state its advantages and limitations.
- **18.** Explain the principle and working of pneumatic comparator with a neat sketch.

