

7261

BOARD DIPLOMA EXAMINATION, (C-20)

FEBRUARY/MARCH — 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 any six types of lathe operations.
- **2.** Write any three specifications of engine lathe.
- **3.** How do you specify a shaper?
- **4.** Mention any six types of work holding devices.
- **5.** Mention any three types of planer operations.
- **6.** What is a cutting fluid?
- **7.** How does cutting fluid improve the tool life?
- **8.** List any three operations performed on slotter.
- **9.** Write the pressure welding.
- **10.** What is fusion welding?

 PART—B 8×5=40

Instructions: (1) Answer **all** questions.

- (2) Each question carries eight marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** (a) Explain with diagram the procedure for thread cutting on a lathe machine.

(OR)

- (b) Explain with diagram the taper turning by tail stock set over method.
- **12.** (a) Explain with diagram any two types of work holding devices.

(OR)

- (b) Explain with diagram taper turning by taper attachment.
- **13.** (a) Describe the horizontal broaching machine with a legible sketch.

(OR)

- (b) Explain with diagram the nomenclature of broach tooth.
- **14.** (a) Explain with sketch the working of TIG welding.

(OR)

- (b) Explain with sketch the working of atomic hydrogen welding.
- **15.** (a) Describe with sketch the procedure for sub merged arc welding.

(OR)

(b) Explain any four defects in welding.

PART—C $10 \times 1 = 10$

Instructions: (1) Answer the following question.

- (2) The question carries ten marks.
- (3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **16.** Explain the procedure to perform plain machining operation on a planer with MS block $75 \times 25 \times 25$ mm.

