

4654

BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH /APRIL-2019  
DME - FIFTH SEMESTER EXAMINATION  
PRODUCTION TECHNOLOGY - III

Time : 3 hours

Max. Marks: 80

**PART-A****10x3=30M**

**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) State any three differences between conventional & nonconventional machining.
- 2) State any three limitations of Ultra Sonic Machining.
- 3) State the principle of Abrasive Jet Machining.
- 4) Why fillers are added to plastics?
- 5) What is calendaring of plastics?
- 6) Draw a line diagram of a press tool and label the parts.
- 7) Distinguish between jig and fixture.
- 8) How a press is specified?
- 9) List out the factors to be considered while selecting a press.
- 10) What is button boring?

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**PART-B**

**5x10=50M**

**Instructions:** 1) Answer any **five** questions. Each question carries **ten** marks.

2) The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.

- 11) Explain the process of Electrical Discharging Machining with a neat sketch. Mention its advantages and applications.
- 12) Describe the laser beam machining with a neat sketch. State its advantages and limitations.
- 13) Explain injection molding process with a neat sketch. State its advantages.
- 14) Explain the principle of the following process with a neat sketch.  
(a) Vacuum forming                      (b) Blow moulding
- 15) Explain any three press tool cutting operations with neat sketches.
- 16) Explain the following.  
(a) Die clearance    (b) Angular clearance              (c) punch clearance
- 17) What are different types of clamps used in jigs & fixtures? Explain hydraulic clamp with neat sketch
- 18) Sketch and explain cross-rail jig boring machine.

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