

3502

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DME - IV SEMESTER EXAMINATION MANUFACTURING TECHNOLOGY - II

Time: 3 Hours] [Total Marks: 80

PART - A

 $3 \times 10 = 30$

Instructions:

- (1) Answer ALL questions.
- (2) Each question carries THREE marks.
- (3) Answer should be brief and straight to the point.
- 1 Write the various gear finishing operations.
- 2 List out any three gear generating methods.
- 3 List various types of tool holding devices used in milling.
- 4 What is the purpose of grinding.
- 5 State the Constant factors to be considered for selection of a grinding wheel.
- 6 What are the limitations of conventional machining.
- 7 State any three advantages of plastics over metals.
- 8 What is meant by power press.
- 9 Distinguish between the Jig and a Fixture.
- 10 Draw a line diagram of cross rail jig boring machine.

Instructions:

- (1) Answer any FIVE questions.
- (2) Each question carries TEN marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- Draw a line diagram of Vertical milling machine and mention the function of each part.
- 12 Explain the following milling operations with simple sketches
 - (a) Slab milling
 - (b) Face milling
 - (c) End milling
 - (d) Convex milling
- 13 (a) Explain the following terms related to grinding wheel
 - (i) Grit (ii) Grade (iii) Structure
 - (b) How a grinding wheel is specified? State the meaning of each parameter.
- 14 Explain the abrasive jet machining with a sketch, state its advantages and disadvantages.
- 15 Explain different types of blow moulding with the help of a neat sketch.
- 16 Draw and explain two different strip layouts for "L" shaped blanking operation.
- 17 (a) Draw the diagram of a box jig and name the parts.
 - (b) Name the different types of fixtures used.
- 18 (a) Explain the working principle of Electro plating with a sketch.
 - (b) Describe the System of location of boles.

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