C16-M–404

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BOARD DIPLOMA EXAMINATION, (C-16)

OCTOBER/NOVEMBER—2023

DME - FOURTH SEMESTER EXAMINATION

PRODUCTION TECHNOLOGY—II

Time : 3 Hours] [*Total Marks* : 80

PART—A 3×10=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. State the differences between straddle milling and gang milling.

2. State the principle of direct indexing.

3. List the various methods of gear manufacturing.

4. State the working principle of grinding operation.

5. State any three applications of grinding.

6. List out any three advantages of non-conventional machining over conventional machining.

7. List out any three moulding methods of plastics.

8. List out the various types of dies.

9. State the advantages of jigs and fixtures.

10. List out the various types of jig boring machines.

PART—B

10×5=50

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 a vertical milling machine and explain the functions of each part.

12. Explain the gear honing method with a neat sketch.

13. What are various methods of grinding? Explain the internal grinding with a neat sketch.

14. Explain the working principle of electrical discharge machining with a neat sketch.

15. Explain the operation of injection moulding of plastics with a neat sketch.

16. Explain the progressive die with a neat sketch.

17. Explain the following with a sketch :

(a) Template jig

(b) Box jig

18. Explain the working principle of open front type jig boring machine with a neat sketch.

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