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C09–M–402

3502

BOARD DIPLOMA EXAMINATION, (C–09)

OCT/NOV—2017

DME—FOURTH SEMESTER EXAMINATION

MANUFACTURING 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. List out the work holding devices used in milling.

2. What are the advatages of gears made of plastic materials.

3. Name six important parts of a milling machine.

4. List any six types of grinding machines.

5. What is bond material and mention any two commonly used bond materials?

6. State any three applications of ultra sonic machining.

7. State any six engineering applications of plastics.

8. What is the purpose of natching and trimming.

9. What are the advantages of using jigs and fixtures?

10. State the applicatons of jig boring machine.

PART—B

10×5=50

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

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain simple indexing with help of a neat sketch.

12. Explain the following milling operations with simple sketches :

(a) Slab milling

(b) Face milling

(c) End milling

(d) Convex milling

13. Explain the following processes :

(a) Honing

(b) Lapping

14. *(a)* What is the principle of abrasive jet machining?

(b) State the principle of EDM with a sketch.

15. *(a)* Describe the principle of calendaring of plastics with a diagram.

(b) Explain the principle of direct blow moulding with neat sketch.

16. Explain any four types of clamps used in jigs and fixtures.

17. *(a)* Draw a neat sketch of a simple die assembly and label the parts.

(b) Differentiate between compound die and progresive die.

18. *(a)* Explain the working priciple of electro plating with a sketch.

(b) Draw a line diagram of cross rail jig boring machine and name the parts.

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