

## 3502

## BOARD DIPLOMA EXAMINATION, (C-09) OCTOBER/NOVEMBER-2018 DME - FOURTH SEMESTER EXAMINATION

## MANUFACTURING TECHNOLOGY – II

Time: 3 Hours ] [ Total Marks: 80

## **PART-A**

3X10=30

Instructions:

- 1. Answer **All** questions.
- 2. Each question carries **three** marks.
- 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1. What are the differences between straddle milling and gang milling?
- 2. State the principle of milling.
- 3. List various types of tool holding devices used in milling.
- 4. What is the purpose of metal spraying?
- 5. What is meant by "Through feed center less grinding"?
- 6. Name the abrasive particles used in abrasive jet machining.
- 7. What is the purpose of filler material as an additive of plastics?
- 8. List out various shaping operations used with press work.
- 9. What are the advantages of hydraulic clamping?
- 10. Draw a line diagram of cross rail jig boring machine.

*Instructions*: 1. Answer any **Five** questions.

- 2. Each question carries ten marks.
- 11. Explain gear shaping method with sketch
- 12. (a) Briefly explain simple indexing with help of neat sketch.
  - (b) Briefly explain the construction and working principle of plain dividing head
- 13. (a) Write short notes on the following terms related to grinding wheel
  - (a) Grit
- (b) Grade
- (c) Structure
- (b) How a grinding wheel is specified? State the meaning of each parameter
- 14. Explain the principle of laser beam machining with a sketch and state its advantages and limitations
- 15. (a) Describe the principle of calendaring of plastics with a diagram
  - (b) Draw sketches showing different stages of "blow moulding".
- 16. How presses are classified and explain anyone with a neat sketch.
- 17. Explain the principle of location of arresting six degrees of freedom
- 18. (a) How a grinding wheel is specified and write the meaning of each parameter
  - (b) Explain the principle of electromagnetic measuring system.

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