

Roll No. ....

Total Pages : 02

**BT-4/M-20**

**34023**

**PRODUCTION TECHNOLOGY**

**ME-202-E**

Time : Three Hours]

[Maximum Marks : 100

**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

**Unit I**

1. Write briefly on :
  - (a) Stepped and stepless drives **10**
  - (b) Hydraulic drives. **10**
2. Describe the principle of stepped regulation. How is common ratio selected ? **20**

**Unit II**

3. Write briefly on turret-indexing mechanism. Also discuss the tooling equipment for turrets. **20**
4. Write briefly on gear generation, gear hobbing and gear shaping. **20**

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### **Unit III**

5. Describe the merits of unconventional machining processes. Write briefly on working of ultrasonic machining. **20**
6. Using a neat sketch, write briefly on principle and working of laser beam machining process. **20**

### **Unit IV**

7. Write briefly on :
  - (a) Sources of vibration during machining **10**
  - (b) Calibration of dynamometers. **10**
8. Using a neat sketch, explain the working of a drill dynamometer. Discuss its limitations. **20**