

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PDDC - SEMESTER-IV • EXAMINATION – SUMMER 2013**

**Subject Code: X41901**

**Date: 04-06-2013**

**Subject Name: Manufacturing Process-I**

**Time: 10.30 am - 01.00 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Give the classification of machining processes **04**  
(b) What are the main different between capstan and turret lathe. **05**  
(c) Show various tools positions for manufacturing threaded bolt on turret lathe. **05**
- Q.2** (a) Explain taper turning operation by swiveling compound rest on lathe machine. **07**  
(b) Explain in brief various alignment tests carried out on lathe. **07**
- OR**
- (b) Explain the construction and working of apron mechanism in lathe. **07**
- Q.3** (a) Give the classification of drilling machine machines. State the applications of each type of drilling machine. **07**  
(b) Describe drilling, counter boring, countersinking, spot facing operations. **07**
- OR**
- Q.3** (a) Give the classification of milling machines. State the applications of each type. **07**  
(b) What is indexing?. Explain plain indexing method. **07**
- Q.4** (a) Differentiate between planer and shaper machine. **07**  
(b) Explain following terms **07**  
(1) Glazing (2) Dressing (3) Truing.
- OR**
- Q.4** (a) Explain construction and working of horizontal boring machine. **07**  
(b) Explain construction of universal milling machine. **07**
- Q.5** (a) Classify broaching machines and write operation and application of broaching. **07**  
(b) State the applications of slotting machines. **07**
- OR**
- Q.5** (a) Explain construction and working of centreless grinding machine. **07**  
(b) Explain construction and working of band saw machine. **07**

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