

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –III • EXAMINATION – SUMMER 2015

Subject Code: 3332303

Date: 11-05- 2015

Subject Name: MOULD FABRICATION TECHNOLOGY-I

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** Answer any seven out of ten. **14**
1. List out different operation done by milling machine.
 2. Definition:- (1)Boring (2)Drilling
 3. Write down major advantages of Annealing process.
 4. List out different ferrous metal & alloys name.
 5. Why the heat treatment process is required for steel?
 6. List out different engineering materials names.
 7. Write down different operation done by Boring machine.
 8. Write down major advantages of Nitriding process.
 9. List out application of Shaping machine.
 10. List out application of Drilling machine.
- Q.2** (a) Discuss application of engineering materials. **03**
- OR
- (a) Write down properties of any two engineering material. **03**
- (b) Short note:-Classification of engineering material. **03**
- OR
- (b) Describe effect of silicon material on properties of steel. **03**
- (c) Discuss effect of alloying elements on steel. **04**
- OR
- (c) List out various non ferrous metals & alloys. **04**
- (d) Describe composition and uses of Cast Iron. **04**
- OR
- (d) Describe application of non ferrous metals & alloys. **04**
- Q.3** (a) Discuss different types of steels. **03**
- OR
- (a) List out different heat treatment process. **03**
- (b) Write down principle of heat treatment process. **03**
- OR
- (b) Short note:-Boring machine. **03**
- (c) Describe Hardening process. **04**

		OR	
	(c)	Describe Normalizing process.	04
	(d)	Discuss Nitriding process.	04
		OR	
	(d)	Discuss Annealing process.	04
Q.4	(a)	Draw a figure of Lathe machine.	03
		OR	
	(a)	Draw a figure of Milling machine.	03
	(b)	Write down construction and advantage & disadvantage of Milling machine.	04
		OR	
	(b)	Short note:-Tempering process.	04
	(c)	Write down construction, operation and advantage & disadvantage of Lathe machine	07
Q.5	(a)	Discuss classification of basic machine tool.	04
	(b)	Write down advantage and disadvantage of Drilling machine.	04
	(c)	List out different operation done by Lathe machine.	03
	(d)	Definition: - (1) Turning (2) Facing.	03
