Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– III EXAMINATION – SUMMER 2015

Subject Code: 133404 **Date: 04/06/2015**

Subject Name: BASIC MFG PROCESSES

Time: 02.30pm-05.00pm **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)**	Explain the Primary and Auxiliary motions with reference to machine tools.	**07**
	(b)	Give the classification of machining processes	**07**
Q.2	**(a)**	Explain the functions of the basic parts of the lathe with neat sketches.	**07**
	(b)	Explain various work holding devices of lathe machine.	**07**
		OR	
	(b)	Show various tools positions for manufacturing threaded bolt on turret lathe.	**07**
Q.3	**(a)**	How lathe machine is specified. Explain in details. Discuss the alignment test of the lathe machine.	**07**
	(b)	Differentiate between shaper and Planer.	**07**
		OR	
Q.3	**(a)**	Explain plain and universal milling.	**07**
	(b)	Derive the Formula for Machining Time calculation for Milling.	**07**
Q.4	**(a)**	Explain Upmilling and Downmilling. List down the advantages of Upmilling.	**07**
	(b)	What is indexing? Explain plain indexing method.	**07**
		OR	
Q.4	**(a)**	Give the classification of drilling machine machines. State the applications of each type of drilling machine.	**07**
	(b)	Explain construction and working of centre less grinding machine.	**07**
Q.5	**(a)**	Describe Radial Drilling machine with its main parts and Explain its applications.	**07**
	(b)	Describe drilling, counter boring, countersinking, spot facing operations.	**07**
		OR	
Q.5	**(a)**	Explain following terms (1) Glazing (2) Dressing (3) Truing (4) Mounting of grinding wheel.	**07**
	(b)	Explain the Standard Marking System for Grinding Wheels.	**07**

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