Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2016

•			3/05/2016	
T	ime: struct		70	
	2	<ol> <li>Attempt all questions.</li> <li>Make suitable assumptions wherever necessary.</li> <li>Figures to the right indicate full marks.</li> </ol>		
Q.1	(a)	State and draw various standard thread forms. Explain thread chasing on a turret lathe with neat sketch.	07	
	<b>(b)</b>	Which instrument is useful for thread inspection? How the screw thread can be inspected?	07	
Q.2	(a)	What purposes are served by the gears? Enumerate various methods of making gear in brief.	07	
	<b>(b)</b>	Discuss the various gear finishing process.  OR	07	
	<b>(b)</b>	What are different form cutter methods for gear manufacturing? Explain any one in detail.	07	
Q.3	(a) (b)	Explain water jet machining with neat sketch. Explain the principle and working of USM. What is the different between USM and conventional grinding?	07 07	
Q.3	(a) (b)	OR  Explain with neat sketch, the working principle of ECM. State its limitations  Explain in which areas, the unconventional manufacturing methods are superior then the conventional manufacturing methods, also state the merits and demerits.	07 07	
Q.4	(a) (b)	Discuss various work holding equipments used on a turret lathe.  Describe a swiss type automatic and tell how it different from other single spindle automatics.	07 07	
Q.4	(a) (b)	OR  Describe sliding head screw machine in detail.  Describe the indexing and locking operational cycle of turret.	07 07	
Q.5	(a) (b)	Write short note on electrical discharge machining.  Explain laser beam machining with neat sketch. Give critical parameters of laser beam machining.	07 07	
Q.5	(a) (b)	OR Explain plasma arc machining process in detail. Compare the similarities and dissimilarities of ECM and EDM.	07 07	

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