Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III EXAMINATION - SUMMER 2016

Subject Code:131903 Subject Name:Manufacturing Process-1			Date:04/06/2016	
Tiı	ne:10 truction 1.	0:30 AM to 01:00 PM ons: Attempt all questions. Make suitable assumptions wherever necessary.	s: 70	
Q.1	(a)	Classify machine tools in detail. Explain types of motions in machine tools with examples.	07	
	(b)	Explain parts of engine lathe in brief with neat sketch.	07	
Q.2	(a) (b)	Explain different taper turning methods. Explain different operations performed with the help of a lathe. OR	07 07	
	(b)	Explain single point cutting tool geometry.	07	
Q.3	(a) (b)	Explain the turret indexing mechanism used in capstan lathe. With figure explain the twist drill nomenclature.	07 07	
Q.3	(a) (b)	OR Explain different types of reamers used in drilling. Classify boring machine. Explain horizontal boring machine & jig boring machine with neat sketch.	07 07	
Q.4	(a) (b)	Write classification of milling machine. Explain principal parts of column & knee type horizontal milling machine with neat sketch Enumerate various milling operations. Explain any three of them with neat	07 at 07	
		sketch. OR		
Q.4	(a)	Explain principal parts of standard planner with neat sketch. Also describe various differences between shaper & planner.	07	
	(b)	Explain crank and slotted link quick return mechanism in a shaper.	07	
Q.5	(a)	Classify sawing machine. Explain vertical band saw machine with neat sketch. Describe various applications of sawing machine.	. 07	
	(b)	Classify broaching machine. Describe various advantages and limitations of broaching machine.	07	
0.5	(c)	OR Exploin grinding wheel designation system	05	
Q.5	(a) (b)	Explain grinding wheel designation system. Differentiate between centre type and centre less grinding machines.	07 07	
