Seat No.: Er	nrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER-IV EXAMINATION - SUMMER 2016

Subject Code:X41901			Date:26/05/2016	
Ti	•	et Name:Manufacturing Process - I 10:30 AM TO 01:00 PM Total Marks:	70	
	1	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 		
Q.1	(a)	Classify machine tool and explain types of motions in machine tools with examples.	07	
	(b)	Explain the working of vertical turret lathe.	07	
Q.2	(a)	Draw simple sketch of engine lathe. List main parts of it and state functions of each part.	07	
	(b)	With neat sketch explain the operation that can be performed on drilling machine.	07	
		OR		
	(b)	Explain radial drilling machine with neat sketch.	07	
Q.3	(a) (b)	Explain various operations carried out on boring machine. List milling machine operation and explain key way milling and gang milling.	07 07	
		OR		
Q.3	(a) (b)	Explain turret type boring machine with neat sketch. Explain with neat sketch horizontal knee and column type milling machine.	07 07	
Q.4	(a) (b)	Derive the formula for machining time calculation for milling. Explain whitworth quick return mechanism for shaper.	07 07	
		OR		
Q.4	(a) (b)	Differentiate between shaper and planer. Explain circular sawing operation.	07 07	
Q.5	(a) (b)	Write advantages limitation and application of broaching machine. Explain universal cylindrical centre type grinding machine.	07 07	
		OR		
Q.5	(a) (b)	Explain plain cylindrical centre type grinding machine. Explain slotted lever type drive mechanism for shaper.	07 07	
