Seat No.:	Enrolment No
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE – SEMESTER III– • EXAMINATION – Winter 2013**

Subject Code:131903		Date: 26/11/2013		
Tir	ne: ( tructio 1. 2.	t Name: Manufacturing Process - I  2:30 to 05:00  ons:  Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	Total Marks:	70
Q.1	(a) (b)	Explain with neat sketches the Primary cutting motions machine, planning machine, shaper, grinder, milling and broak With a neat sketch explain horizontal boring machine and givarious parts.	ching machine.	07 07
Q.2	(a) (b)	List various taper turning methods and explain in detail with taper turning method using the attachment.  List various types of work holding devices used in a lathe and with neat sketches various types of dead centres.  OR		07 07
	<b>(b)</b>	Explain hydraulic quick return mechanism in a shaper with a	neat sketch.	07
Q.3	(a) (b)	With neat sketches explain the various operations performed of List different indexing methods used in milling machine an plain indexing with a neat sketch the layout of the drive dividing head to the work piece.	d explain in detail	07 07
		OR		
Q.3	(a) (b)	List various types of grinding machines and with a neat skeless grinding machine.  List various types of drilling machine and explain with a drilling machine.	-	07 07
Q.4	(a) (b)	List various types of planers. Compare in detail Shaper and planers can slotter be called as vertical shaper? Justify your answer explain operations performed on slotter.  OR		07 07
Q.4	(a)	List various types of sawing machines and explain with sawing machine.		07
	<b>(b)</b>	What is broaching? Give detailed classification of the broache	es.	07
Q.5	(a)	With neat sketches discuss the operations that can be perfunchine.	formed on drilling	07
	(b)	With a neat sketch explain working of back gear arrange machine. OR	ment on the lathe	07
Q.5	(a)	Discuss in detail the factors to be considered for selection wheels.	on of the grinding	07
	<b>(b)</b>	What is the need of alignment test for a machine tool? What these tests? List the alignment tests to be carried out on the M		07

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