Seat No.:	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV (New) EXAMINATION - WINTER 2015

•		Code:2141901 Date:30/12/20 James Machanical Magazyamanta & Matralagy)15
_	: 2:3	Name: Mechanical Measurements & Metrology 30pm to 5:00pm Total Marks	: 70
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a (b	•	07 07
Q.2	(a		07
	(b	process. Explain briefly: 1) Teliscopic Gauge 2) Dial Bore Gauge	07
		OR	
	(b)	Classify the Comparators and explain Sigma Comparators with neat sketch.	07
Q.3	(a	Describe with neat sketch the construction and working of Vernier bevel protractor.	07
	(b)	Explain various forms of Gear teeth and explain Gear tooth vernier caliper with neat sketch.	07
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Q.3	(a	· •	07
	(b	measuring the effective diameter of a screw thread. Explain with the help of neat sketches the principle and construction of an auto-Collimator.	07
Q.4	(a	Describe with sketch the construction and working of a RTD. Give advantage and disadvantage of RTD.	07
	(b		07
Q.4	(a	Sketch and describe the construction and working of Bellows pressure gauge.	07
	(b)		07
Q.5	(a	i) Explain the followings:i) Optical strain gaugesii) Gauge factor	07
	(b		07
Q.5	(a		07
	(b		07