Seat No.: _		Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY	
ME - SEMESTER- II(New course) • EXAMINATION (Remedial) – WINTER- 2015 Subject Code: 2722809 Date: 11/12/2015 Subject Name: METROLOGY & COMPUTER AIDED INSPECTION			
		2:30 pm to 5:00 pm Total Marks: 70	
Instru	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q-1	` '	Explain what is error and types of error. Define linear measurement. Explain in brief about Vernier caliper with sketch.	07 07
Q-2	(a)	Discuss the advantage and limitation of vernier calipers, micrometer screw gauge and dial indicators.	07
	(b)		07
	(b)	Explain with neat sketch mechanical type sigma comparator.	07
Q-3	` '	Explain limitation, characteristics and error of sine bar. Write the Sine Principle. Explain how to find unknown angle by using the sine Principle with sketch.	07 07
		OR	
Q-3	(a)	Explain with a neat sketch Tomlinson surface recorder? Explain the Construction of it.	07
	(b)	Explain and major features of CMM.	07
Q-4	(a) (b)	Explain Proximity and ultrasonic sensor. Types of coordinate measuring machine and their application. OR	07 07
Q-4	(a)		07
	(b)	Write short note on õLASER Interferometerö	07
Q-5	(a)	Define sensor. Explain basic operating principle of sensor with a schematic diagram.	07
	(b)		07
		OR	
Q-5	(a) (b)		07 07
