Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VII (OLD) - EXAMINATION - SUMMER 2017

5	Subject Code: 170204 Date: 06/05/20		06/05/2017
7	Subject Name: Automobile Mechanical Measurements Time: 02:30 PM to 05:00 PM Instructions:  1. Attempt all questions.  Total Marks: 70		Marks: 70
		<ol> <li>Attempt an questions.</li> <li>Make suitable assumptions wherever necessary.</li> <li>Figures to the right indicate full marks.</li> </ol>	
Q.1	(a) (b)	Distinguish between line standard and end standard stating examples. Define and classify fit. Explain Clearance fit.	07 07
Q.2	(a) (b)	Describe with neat sketch the construction and working of micrometer Explain the method of checking straightness with Auto-collimator.  OR	07 07
	(b)	Describe in brief the construction and working of a sigma comparato help of a neat sketch.	r with the <b>07</b>
Q.3	(a) (b)	Explain the surface texture and elements of surface roughness.  Explain angle dekkor with neat sketch stating application of it.  OR	07 07
Q.3	(a) (b)	Explain three wire method to measure the effective diameter of given thread with neat sketch.  Describe with sketch the construction and use of gear tooth vernier calculates.	
Q.4	(a) (b)	What is thermistor? Explain with neat sketch the construction and wo thermistor.  Sketch and explain McLead gauge used for low pressure measurement	
	(2)	OR	<i>.</i>
Q.4	<ul><li>(a)</li><li>(b)</li></ul>	Explain the construction and working of LVDT with its advantage and disadvantages  Sketch and explain the elements of a thermoelectric pyrometer.	07 07
Q.5	(a) (b)	List the different types of Mechanical tachometer and explain any one Explain the principle and types of electrical Strain gauges.  OR	of them. <b>07 07</b>
Q.5	(a) (b)	Sketch and describe the construction and working of Rotameter. Explain Piezoelectric accelerometer with a neat sketch.	07 07

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