SNS College of Technology, Coimbatore-35.
(Autonomous)
B.E/B.Tech- Internal Assessment -III
Academic Year 2022-2023 (Even)
Fourth Semester
Mechanical Engineering
19MET205 – Metrology and Measurements

A

Time: 1$^{1/2}$ Hours   **Maximum Marks: 50**

Answer All Questions

PART - A (5 x 2 = 10 Marks)		
	CO	**Blooms**
1. Why is monochromatic light used in interferometer?	CO 4	Rem
2. State the principle of CNC CMM.	CO 4	Und
3. Discuss about bimetallic thermometer.	CO 5	Und
4. State the principle of eddy current method.	CO 5	Und
5. List out the types of laser interferometer.	CO 5	Rem

PART – B (2 x 13 = 26 Marks) and (1 x 14 = 14 Marks)				
			CO	**Blooms**
6.	(a)	Apply the various laser scanning methods for measure the dimensions of object.	13	CO 4	App
		(or)			
	(b)	Summarize the working principle of dual frequency and Michelson interferometer.	13	CO 4	Und
7.	(a)	Compare the hydraulic load cell and strain gauge load cell in force measurements in industries.	13	CO 5	App
		(or)			
	(b)	List out types of temperature measurements and explain the temperature measuring techniques with using thermocouple.	13	CO 5	Rem
8.	(a)	Demonstrate – How a CMM used in measurements.	14	CO 4	Und
		(or)			
	(b)	Summarize the use of dynamometer for measurement of torque.	14	CO 5	Und
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CO – Course Outcome, Und- Understanding, Rem- Remembering, App-Apply, Ana-Analyze, Eva-Evaluate

Prepared by   **Verified by**   **HOD/ Mech(Academics)**