



Reg.No:

--	--	--	--	--	--	--	--

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

B

Time: 1<sup>1/2</sup> Hours

Maximum Marks: 50

Answer All Questions

PART - A (5 x 2 = 10 Marks)

			CO	Blooms
1.		List out the merits of laser interferometer	CO 4	Rem
2.		State the principle of dual frequency laser interferometer.	CO 4	Und
3.		List out the types of power measuring instruments.	CO 5	Rem
4.		State the principle of strain gauge load cell.	CO 5	Und
5.		Identify the requirements of bourdon pressure gauge.	CO 5	Rem

PART – B (2 x 13 = 26 Marks) and (1 x 14 = 14 Marks)

			CO	Blooms	
6.	(a)	Construct and state the working principle of coordinate measuring machine and its applications.	13	CO 4	Und
		(or)			
	(b)	Categorize the laser telemetric system for measure the dimensions of object.	13	CO 4	App
7.	(a)	Explain the torque measuring techniques with neat diagram.	13	CO 5	Und
		(or)			
	(b)	Compare the pneumatic load cell and elastic force meter in force measurements in core industries.	13	CO 5	App
8.	(a)	Demonstrate – How a TRIMOX and Machine vision system used in advanced measurements.	14	CO 4	Und
		(or)			
	(b)	List out types of temperature measurements and explain the temperature measuring techniques with using electrical thermal resistance thermometer.	14	CO 5	Rem
		*****			

CO – Course Outcome, Und- Understanding, Rem- Remembering, App-Apply, Ana-Analyze, Eva-Evaluate

Prepared by

Verified by

HOD/ Mech(Academics)