

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech Mid Semester Exam

Semester: 4th Sem
 Subject Code: (303122253)
 Subject Name: (Sensors and Transducers)

Date: (30/01/2024)
 Time: (1hr: 30min)
 Total Marks: 40

Sr. No.		Marks
Q.1	(A) One line Questions 1) Give any 2 names of Force measuring devices. 2) Give any 2 names of pressure measuring devices. 3) Give names of any 2 Motion Sensor . 4) State the name of any Range Sensor. 5) Give Full form of LIDAR.	05
	(B) Fill in the blanks 1) The physical variable that is measured between two values is called as a _____ . 2) _____ is the degree of closeness with which a given value may be repeatedly measured. 3) The difference between the measured and actual values is called as _____ 4) A _____ is a device that detects and responds to some type of input from the physical environment . 5) _____ is an electro-mechanical device that provides users with information on position, velocity and direction.	05
Q.2	Attempt any four(Short Questions)	12
	(1) Explain any 1 Force Measuring device in detail.	
	(2) Explain any 1 Pressure measuring device in detail .	
	(3) Explain any 1 Torque measuring device in detail.	
	(4) Explain working of Ultrasonic Sensors.	
	(5) Give the applications of Bluetooth .	
Q.3	Attempt any two questions	08
	(1) Give the classification of Sensors.	
	(2) Give the working principle of Potentiometer .	
	(3) Explain the working of GPS.	
Q.4	(A) Explain the working of LIDAR	05
	(B) Describe LVDT in detail with specific diagrams .	05
	OR	
	(B) Apply the knowledge of various sensors and give any real application used in Industry.	05