

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Nov – Dec 2024			Scheme IIB	
B. Tech Program: Electronics & Telecommunication			Semester: V	
Regular Examination: TY			Course Name: Sensor Technology	
Course Code: EXDLC5052			Max. Marks: 60	
Date of Exam: 29-11-24		Duration: 02.5 Hours		

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

Q. No.	Question	Max. Marks	CO	BT level
Q.1	Solve any two questions out of three: (05 marks each)	10		
a)	Explain Digital sensor and principle over analog Sensor.		1	U
b)	Explain Level sensors.		2	U
c)	Differentiate between active and passive micro valves.		3	U
Q.2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain concepts of piconet and Scatternet of Bluetooth technology.		4	R
b)	Discuss multi-Channel Data Acquisition System.		5	R
c)	Explain Sensors in Ultrasound Imaging.		6	R
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Explain Smart sensors with examples.		1	R
b)	Write a short note on: Proximity Sensors: Inductive (LVDT), Capacitive.		2	U
c)	Explain types of micro machine microphone.		3	R
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Discuss different types of network topology that are supported in ZigBee.		4	U
b)	Discuss briefly block diagram of Data Logger.		5	U
c)	Explain Sensors used for environmental monitoring.		6	U
