

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

~~Jan Nov Dec 2026~~

(B. Tech) Program: Electronics & Telecommunication Scheme:III

~~Supplementary Exam~~ Regular Examination: TY Semester: V

Course Code: EXDLC5042 and Course Name: Sensor Technology

Date of Exam: ~~28/11/25~~ 02/12/26. Duration: 02.5 Hours

Max. Marks: 60

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)	Write different applications of sensors.		1	U
b)	Explain concepts of piconet and Scatternet of Bluetooth technology.		4	U
c)	Discuss briefly block diagram of Data Logger.		5	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain Smart sensors with examples.		1	U
b)	Discuss NFC standards and technical characteristics.		4	U
c)	Discuss multi-Channel Data Acquisition System.	5	U	
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Write Short Note on: Pressure Sensor, Level Sensor.		2	U
b)	What is MEMS sensing? What are the types of MEMS sensing and explain them.		3	U
c)	Explain Sensors in Ultrasound Imaging.	6	U	
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Write Short Note on: Proximity Sensor, IR Sensor.		2	U
b)	What is MEMS device? Explain DMD with operation and array.		3	U
c)	Explain Overview of Onboard Monitoring system prototype.	6	U	

Seat No.: