Roll No.												

PRESIDENCSY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 09-10-2025 **Time:** 09.30am to 11.00am

School: SOCSE/SOIS	**Program:** COMPUTER SCIENCE AND NETWORKS	
Course Code : CSN2504	**Course Name:** WIRELESS SENSOR NETWORK	
Semester: V	**Max Marks**: 50	**Weightage**: 25%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**25**	**25**			

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks. **5Q x 2M=10M**

1	Explain the role of reconfigurable sensor networks in military surveillance	**2 Marks**	**L1**	**CO1**
2	What is source-node processing in WSNs?	**2 Marks**	**L1**	**CO1**
3	Explain collaborative data processing in WSNs.	**2 Marks**	**L3**	**CO2**
4	What is intelligent data reduction?	**2 Marks**	**L1**	**CO2**
5	List the WSN research trends	**2 Marks**	**L1**	**CO2**

Part B

Answer the Questions. **Total Marks 40M**

6.	**a.**	Differentiate between Category 1 WSN and Category 2 WSN with architecture	**10 Marks**	**L1**	**CO1**
	b.	Explain the applications of Wireless Sensor Networks in a) home automation and building automation b) Habitat Monitoring c) Nanoscopic Sensor Applications	**10 Marks**	**L3**	**CO1**
		Or			
7.	**a.**	Explain about the sensing nodes with block diagram?	**10 Marks**	**L3**	**CO1**
	b.	Explain C2WSN Applications	**10 Marks**	**L3**	**CO1**

8.	**a.**	Explain the Hardware and Software of Sensor Node Technology	**10 Marks**	**L3**	**CO2**
	b.	Explain campus applications of WSNs with examples.	**10 Marks**	**L3**	**CO2**
		Or			
9.	**a.**	Explain MAN/WAN applications of WSNs.	**10 Marks**	**L3**	**CO2**
	b.	Explain Bluetooth and WiMAX technology (architecture, duplexing, MAC, applications)	**10 Marks**	**L3**	**CO2**