



R18 Regulation

Subject code:2E7FL

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

**B.Tech VII Semester Supplementary Examinations, November 2023**

## WIRELESS SENSOR NETWORKS (Information Technology)

Maximum Marks: 70

Date:09.12.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

### Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

1	What are the characteristic WSN.	L1
2	Distinguish between Thread-Based and Event-Based Programming of operating system	L1
3	Explain the Error Recognition and Correction.	L1
4	What is ZIG-BEE.	L1
5	What are the Network layer responsibility?	L1
6	What is AODV protocol?	L1
7	What are the clock parameters?	L1
8	What is Triangulation?	L1
9	Define Privacy Attacks.	L1
10	Write about Denial of service?	L1

### Part-B

Answer All the following questions.

(5X10M=50Marks)

11	a) Explain about challenges of wireless sensor networks. [5] b) Describe the Prototypes of Operation System. [5]	L2 L2
OR		
12	Explain about applications in wireless sensor networks. [10]	L4
13	a) Distinguish between TDMA and FDMA with a neat sketch diagram. [5] b) Explain Source Encoding in Physical Layer. [5]	L2 L2
OR		
14	Define Wireless MAC Protocol and explain MACA and MACAW. [10]	L2
15	Discuss about Power Management with an examples. [10]	L2
OR		
16	Discuss in details of any two Table-Driven Routing Protocol in Ad-Hoc Networks. [10]	L2
17	a) Explain Triangulation and Trilateration of Range-Based Localization. [5] b) Describe about GPS-Based location. [5]	L2 L2

	OR	
18	Discuss in details of any two Time Synchronization protocol in wireless sensor networks. [10]	L2
19	What are fundamental of Networks Security. [10]	L2
	OR	
20	Discuss in details privacy attacks. [10]	L2