R18 Regulation *Subject code:2E8DA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VIII Semester Regular/Supplementary Examinations, April 2023

Adhoc Wireless Sensor Networks

(Electronics and Communication Engineering)

Maximum Marks: 70 Date:03.05.2023 Duration: 3 hours

Part-A

All the following questions carry equal marks (10x2M=20 Marks)

1 Outline the challenging issues in Ad Hoc network maintenance.
2 Differentiate between proactive and reactive routing protocols.
3 Compare the terms- Multicast and Geocast.
4 What is TCP mechanism used in congestion avoidance?
5 Write short notes on SMACS.
6 Give the main drawback in Threshold-Sensitive Energy Efficient sensor network.
7 Mention the limitations of Current Key Pre-Distribution Schemes.
8 Present the challenges in selecting a programming tool.
9 Enlist the application of TinyOS.
10 What are node-level simulators in WSN?

Part-B

Answer All the following questions. (5X10M=50Marks)

11 Define MANET? Explain characteristics of MANET. (10M)

OR

12 Discriminate the topology organization in DSDV and ZRP routing protocols with a sample network. (10M)

13 A. Explain the terms – RDT and Jitter used in broadcast algorithms. (5M)
B. Illustrate the working of AMRIS, a multicast protocol. (5M)

OR

14 Draw and explain in detail the TCP header format. (10M)
15 Explain about the design Issues in MAC layer of Wireless Sensor Network. (10M)

OR

16 Describe in detail about the MAC Protocols for Sensor Networks. (10M)

17 Discuss and analyze N-Party Diffie-Hellman Key Agreement protocols in detail. (10M)

OR

18 Explain the issues and Challenges in Sensor network programming. (10M)
19 Explain how the TinyOS operating system supports resource constrained hardware platforms. Present a detailed discussion. (10M)

OR

20 Explain the nesC language. (10M)