Regulation R18 *Subject code: 2E8DA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VIII Semester Supplementary Examinations, May 2026

ADHOC WIRELESS SENSOR NETWORKS

(ECE)

Maximum Marks: 70 Date:04.05.2026 **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 10 questions. Answer any 5 questions which carries 10M.
4. Each question carries 10marks and may have a, b, c, d as sub questions.

	Part-A
All the following questions carry equal marks	(10X2M=20 Marks)
1	Write the differences between infrastructure based and Adhoc Network?
2	Write the challenging issues in ad hoc network maintenance.
3	Differentiate between unicast and multicast.
4	Write short notes on TCP protocol.
5	Define Mica Mote.
6	Define wireless sensor network.
7	Define key agreement and key establishment.
8	What are the characteristics of Berkeley mote family.
9	Write the application example of TinyOS.
10	What is the need for nesC language in sensor network programming.
	Part-B
Answer any five questions	(5X10M=50Marks)
11	(a) Differentiate between cellular network and an ad hoc network. [5m] (b) Write the major advantages of an ad hoc wireless Internet. [5m]
	OR
12	Explain the process of DSDV protocol with an example. [10m]
13	Explain the types of controlled flooding in broadcast storm. [10m]
	OR
14	Explain briefly about end to end approach in TCP over Adhoc. [10m]
15	Define types of clustering sensors with an example. [10m]
	OR
16	Elaborate and explain the design goals of MAC protocols for Adhoc Wireless Networks. [10m]
17	Explain the requirements of security in Adhoc networks. [10m]
	OR
18	Explain the three categories of sensor node hardware. [10m]
19	Explain the Tiny OS application field monitor. [10m]
	OR
20	Explain TinyGALS programming model. [10m]