Code No.: CS8242PE   R20   H.T.No. [ ] [ ] [8] [R] [ ] [ ] [ ] [ ]

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
I–M.TECH–II–Semester End Examinations (Supply) – September- 2023
WIRELESS AND SENSOR NETWORKS
(CSE)

[Time: 3 Hours]   [Max. Marks: 70]

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

PART-A   (20 Marks)

1. a)	Define Ad Hoc network.	[2M]
b)	Explain the key features of TCP.	[2M]
c)	List out tree-based routing protocols..	[2M]
d)	List out mesh-based routing protocols.	[2M]
e)	Explain the MAC protocol.	[2M]
f)	List the steps involved in transferring data over an established TCP connection.	[2M]
g)	What is the primary purpose of data retrieval in sensor networks?	[2M]
h)	How does data aggregation contribute to energy savings in sensor networks?	[2M]
i)	What are the main security challenges in ad hoc networks?	[2M]
j)	List the difficulties in maintaining secure and efficient key distribution in dynamic networks.	[2M]

PART-B   (50 Marks)

2.	Identify the challenges and application of MANETs.	[10M]
	OR	
3.	Compute route maintenance in AODV routing protocol with an example.	[10M]
4.	Discuss the simple flooding rebroadcasting scheme.	[10M]
	OR	
5.	Discuss about MAODV routing protocol.	[10M]
6.	Explain the architecture of sensor networks.	[10M]
	OR	
7.	Classify of wireless sensor networks based on MAC Protocol.	[10M]
8.	Explain the data retrieval in sensor networks.	[10M]
	OR	
9.	Explain the high-level application support protocols.	[10M]
10.	Illustrate the security in the ad hoc networks.	[10M]
	OR	
11.	Explain the secure routing in wireless networks.	[10M]

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