

25/03/25

Code No.: R22CS58242PE

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CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

I-M.TECH-II-Semester End Examinations (Supply) – March 2025

WIRELESS AND SENSOR NETWORKS (PE - IV)

(CSE)

[Time: 3 Hours]

[Max. Marks: 60]

**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****(10 Marks)**

1. a) List out the major application of WSN. [1M]
- b) List out the Characteristic of MANETs. [1M]
- c) MAODV which type of routing protocol. [1M]
- d) List the hybrid routing protocol for WSN. [1M]
- e) Which MAC protocols are used in WSN? [1M]
- f) Explain the basic principal of WSN. [1M]
- g) Compare Sink node and Base station. [1M]
- h) What the major responsibility of MAC layer. [1M]
- i) Explain the key management methods in WSN. [1M]
- j) What is the need of security in ad hoc networks? [1M]

**PART-B****(50 Marks)**

2. Discuss the AODV routing protocol. [10M]
- OR**
3. Explain the characteristics of ad hoc networks. [10M]
4. Explain need of TCP protocol in wireless sensor networks. [10M]
- OR**
5. Explain the probability-based methods for data transmission. [10M]
6. Explain the data retrieval in wireless sensor networks. [10M]
- OR**
7. Explain the TCP over Ad hoc TCP protocol. [10M]
8. Discuss the solution for TCP over Ad Hoc networks. [10M]
- OR**
9. List and discuss the transport layer protocol for sensor networks. [10M]
10. Explain the secure routing in mobile ad hoc networks. [10M]
- OR**
11. Discuss the types of intrusion detection system in networks. [10M]

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