Roll No……..….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [11]

M. Tech CSE (Semester – 1st)
WIRELESS SENSOR NETWORKS
Subject Code: MCSES1103
Paper ID: [23190203]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. What is Mote? How does it work?

Q2. What are Markov chains useful for?

Q3. Differentiate between broadcast and multicast.

Q4. What are the advantages of SPIN?

Section – B **(8 marks each)**

Q5. What are the performance metrics of WSN?

Q6. What is ns-3? What will you use it for?

Q7. What are the applications and characteristics of MANET?

Q8. What is the security of WSN network? How is it ensured?

Section – C **(10 marks each)**

Q9. What is WSN? What are its the applications?

Q10. What are the types of routing used in WSN? Explain any one in detail.

Q11. What is MAC protocol and its analysis? How is the analysis done?