

Code No: **R42054****R10****Set No. 1****IV B.Tech II Semester Supplementary Examinations, April - 2018****MOBILE ADHOC AND SENSOR NETWORKS****(Common to Computer Science and Engineering and Information Technology)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Compare cellular networks with ad hoc wireless networks. [8]
b) Briefly explain the applications of wireless ad hoc networks. [7]
- 2 a) Compare proactive and reactive routing protocols for MANETs. [5]
b) Explain OLSR and DSR protocols for MANETs. [10]
- 3 a) Describe flooding-generated broadcast storm in MANETs. [8]
b) Explain Ad hoc TCP. [7]
- 4 a) List and explain the security requirements for MANETs. [7]
b) Explain the ARAN secure routing protocol for MANETs. [8]
- 5 a) Explain the issues and challenges in designing a sensor network. [8]
b) Describe the clustering of sensor nodes in a wireless sensor networks. [7]
- 6 a) Explain the sensor-MAC protocol for sensor networks. [8]
b) Describe data aggregation in sensor networks. [7]
- 7 a) Write about the NS-2 simulator and its sensor network extensions. [7]
b) Explain field monitor application of TinyOS with a neat block diagram. [8]
- 8 a) Discuss about secure data aggregation in wireless sensor networks. [8]
b) Write about vehicular ad hoc networks. [7]