

MANIPAL UNIVERSITY
SCHOOL OF INFORMATION SCIENCES

MASTER OF ENGINEERING - **ME FIRST SEMESTER** (AUTOMOTIVE EMBEDDED
SYSTEM) / **SECOND SEMESTER** (EMBEDDED AND WIRELESS TECHNOLOGY)
DEGREE EXAMINATION – APRIL / MAY 2016

SUBJECT: AES 603/ **EWI 616.1** (ELECTIVE 2) – VEHICULAR ADHOC NETWORKS

Wednesday, April 27, 2016

Time: 10.00 – 13.00 Hrs.

Max. Marks: 100

1. What is a VANET? Explain briefly the various VANET applications.
(2+8 = 10 marks)
2. Explain the three core components of Secure Position-Based Routing Protocol?
(10 marks)
3. What are the various types of attacks in Vehicular Adhoc Networks? Explain with respect to Attacker's model.
(4+6 = 10 marks)
4. What is the significance of emergency message dissemination? Explain the challenges involved in emergency message dissemination
(3+7 = 10 marks)
5. What is the significance of Geographical Data Aggregation in VANET? Discuss any two Data aggregation schemes for VANETs.
(2+8 = 10 marks)
6. Explain the role of Vehicle-to-Vehicle applications in Cooperative Vehicular Safety.
(10 marks)
7. Explain how the local measurements are obtained for Information Dissemination in VANETs?
(10 marks)
8. Write a note on Priopulses. Explain the Priority-Ensured Medium Access scheme.
(4+6 = 10 marks)
9. What are the key issues to be considered when discussing MAC approaches for VANET? Explain
(10 marks)
10. Explain any five challenges of Data Security in Vehicular Adhoc Networks.
(10 marks)
