Question Paper

Exam Date & Time: 29-Nov-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES

FIRST SEMESTER MASTER OF ENGINEERING - ME (AUTOMOTIVE EMBEDDED SYSTEMS)

Vehicular Adhoc Networks [AES 603]

Marks: 100

Duration: 180 mins.

END SEMESTER DEGREE EXAMINATION NOVEMBER 2018

Answer all the questions.

What is the importance of VANET? Explain briefly the (10) challenges faced in the implementation of VANET. (2+8)
What is Topology based routing protocol? Classify and (10) explain the different types in it. (2+8)

³⁾ Explain the working of the following protocols: (5+5) ⁽¹⁰⁾

a. Improved Greedy Traffic Aware Routing protocol (GyTAR).

b. Adaptive Movement Aware Routing protocol (AMAR).

⁴⁾ Write a note on the following with respect to Secure ⁽¹⁰⁾ Position based routing: (5+5)

- a. Cryptographic protection
- b. Plausibility checks
- ⁵⁾ What is the approach and outline of the Medium Access ⁽¹⁰⁾ Control scheme for emergency message dissemination?
- ⁶⁾ Explain the Neighbour topology awareness based algorithm ⁽¹⁰⁾ in IP passing and name the various parameters used in it.
- ⁷⁾ Explain clustering and beaconing with respect to ⁽¹⁰⁾ information transport in VANETs.
- ⁸⁾ Explain the working of Time-division multiple access ⁽¹⁰⁾ (TDMA) system for MAC based approach.
- ⁹⁾ Write a comparison between Curious hacker and Academic ⁽¹⁰⁾ hacker.

¹⁰⁾ Mention the different FCC regulations regarding Road Side ⁽¹⁰⁾ Units and On-board Units.

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