

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

BMCI (2014 & Onwards) (Sem.-6)

MOBILE ADHOC NETWORKS

Subject Code : BMCI - 603

M.Code : 74317

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1) Explain the following :

- a) What is reactive routing protocol? Give example.
- b) How heterogeneity in mobile devices effect mobile communication?
- c) Define Wormhole attack.
- d) Which type of applications use IEEE 802.15 standard?
- e) What is multipath fading?
- f) What is inter-symbol interference?
- g) What are the effects of induced traffic in ad hoc network?
- h) List the characteristics of wireless channel.
- i) What do you mean by slow-start in TCP?
- j) What is the maximum achievable data rate over a 9KHz channel with signal to noise ratio 20dB?

SECTION-B

- 2) What are the advantages of distributed power control algorithms in ad hoc wireless networks over the centralized power control algorithms?
- 3) List the issues in designing a transport layer protocol for ad hoc networks.
- 4) Compare and contrast the IEEE 802.11e MAC protocol with the DBASE protocol.
- 5) Discuss the impact of discharge characteristics on battery capacity.
- 6) What role does the routing protocol play in the provisioning of QoS guarantees for ad hoc wireless networks?

SECTION-C

- 7) Explain the working of AODV routing protocols with the help of suitable example. List its advantages and disadvantages.
- 8) List the features of multiple access collision avoidance protocol for wireless LANs (MACAW). How packet exchange happens in MACAW protocol? Explain with the help of suitable example scenario.
- 9) Write short note on :
 - a) Components of Packet Radios
 - b) Issues in providing QoS in Ad hoc wireless networks

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.