

B.TECH.**THEORY EXAMINATION (SEM-VIII) 2016-17****MOBILE COMPUTING****Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer.****SECTION – A****1. Attempt the following:****10 x 2 = 20**

- a) What do you understand by Mobile Computing
- b) What is Mobile IP?
- c) What are the basic differences between wireless WAN and wireless LAN.
- d) Describe Temporary Ordered Routing Algorithm (TORA).
- e) In context to cellular network, explain Near and Far Problem.
- f) Explain HLR and VLR in GSM architecture.
- g) Explain the concept of Hand over.
- h) Define Adaptive Clustering.
- i) Explain Data Broadcasting.
- j) What are the different GSM Services?

SECTION – B**2. Attempt any five parts of the following questions:****5 x 10 = 50**

- a) What is General Packet Radio Service (GPRS)? Describe its architecture in detail.
- b) With neat sketch, explain architecture of 802.11 LAN and explain its MAC Logic.
- c) List and define the entities of Mobile IP and describe data transfer from a mobile node to a fixed node and vice versa.
- d) "CSMA/CD is not a suitable protocol for wireless LAN". Give reasons in favor of or against the statement.
- e) Describe Various Multiplexing Technique. Explain why a given band is used most efficiently in CDMA.
- f) Why does traditional TCP not perform well in wireless network? Discuss different approaches for TCP improvement.
- g) Describe the Fault Tolerance issues involved in Mobile Computing? What are the Monitoring Process
- h) Discuss the architecture of GSM. Also discuss the security issues to implement GSM.

SECTION – C**Attempt any two parts of the following questions:****2 x 15 = 30****3. Write short notes on following**

- (i) Global State Routing (GSR)
 - (ii) Dynamic Source Routing(DSR)
 - (iii) Destination Sequenced Distance Vector Routing (DSDV)
- 4.** What are the characteristics of MANET? Explain the process of Path Discovery and Path Maintenance in DSR Routing Protocols.
- 5.** What do you mean by CODA file system and also explain the clients in CODA? How Disconnected Operations are performed in CODA?