

TH5 Mobile Computing

Full Marks: 80

Time- 3 Hrs

**Answer any five Questions including Q No.1& 2
Figures in the right hand margin indicates marks**

1. Answer **All** questions 2 x 10
 - a. Define Network mobility.
 - b. Mention the name of the layers present in N-tier architecture.
 - c. What is the role of Base Transceiver Station in mobile communication system
 - d. Differentiate between Ground Wave Propagation and Sky Wave Propagation.
 - e. Which technology is used in 4th Generation of Mobile Communication?
 - f. What is the role of WAP PUSH process?
 - g. Mention the name of the components of Mobile IP.
 - h. Differentiate between Home Location Register and Foreign Location Register.
 - i. Define Near and Far terminal.
 - j. What does W-CDMA Stands for?
2. Answer **Any Six** Questions 5 x 6
 - a. Differentiate between Amplitude Modulation and Frequency Modulation.
 - b. Briefly explain UMTS architecture with a neat diagram.
 - c. Define Bluetooth Technology. Differentiate between Piconet and Scatternet in Bluetooth communication. (Any five)
 - d. Illustrate WWW architecture for Mobile Computing with proper diagram. .
 - e. Describe the components of GSM with proper diagram.
 - f. Explain about the entities of Mobile IP.
 - g. Describe the working principal of MMS.

Answer **Any Three** Questions
3. Explain about the various standards of IEEE 80211. 10
4. Define Multiplexing. Elaborate different types of Multiplexing techniques used in Mobile Computing. 2+8
5. Briefly explain the generation of Mobile Communication. 10
6. Write the benefits of WAP. Give any three examples where WAP is used. Draw and explain the architecture of WAP. 2+4+4
7. Write short notes on 2 x 5
 - i. IS-95
 - ii. CDMA 2000
 - iii. Wireless Sensor Network
 - iv. GPRS
 - v. GPRS architecture