

## **VII SEM**

### **ASSIGNMENT QUESTIONS**

#### **MOBILE COMPUTING**

##### **Section – A**

- 1.** What are signals? Explain signal propagation ranges.
- 2.** What is multiplexing? Explain the different types.
- 3.** Explain modulation and its types.
- 4.** What is medium access control? Explain in detail.
- 5.** Draw the flow diagram for Aloha and explain pure aloha and slotted aloha.
- 6.** Explain the CSMA protocol.
- 7.** What is polling? Explain.

##### **Section – B**

1. What are the mobile services offered by GSM?
2. Draw and explain the architecture of GSM.
3. Explain GSM Hierarchy of frames.
4. What are the types of handovers in GSM? Explain.
5. Explain the architecture of DECT.
6. What are the domains and interfaces of UMTS?
7. Explain the concept of breathing cells.
8. What is LTE? Draw the frame structure and architecture.

##### **Section – C**

1. Explain the characteristics and design goals of WLAN.
2. What is HiperLan? Explain its features.
3. Draw the architecture and protocol stack of Hiperlan 2.
4. Draw the structures for piconet and scatternet.
5. Explain the motivation and requirements for Mobile IP.
6. Write short notes on
  - a. Snooping TCP
  - b. Mobile TCP
  - c. Transaction oriented TCP

##### **Section – D**

1. What is WAP? Explain its main features.
2. Explain WAP protocol stack in detail.
3. What is WTLS? Explain its architecture.
4. Explain the architecture and memory management of Palm OS.

5. What are the functions of data manager and resource manager in Palm OS?
6. Explain memory management in Symbian OS.
7. Explain the architecture of Symbian OS.
8. What is the memory model of Windows CE?
9. Explain the concept of drivers in Windows CE.

## **IMPORTANT QUESTIONS**

### **Section – A**

- 1.** What are the advantages of CDMA?
- 2.** Explain FDM.
- 3.** How does CSMA/CD work?
- 4.** Compare Aloha & slotted Aloha.
- 5.** Explain the CSMA protocol.

### **Section – B**

1. Explain the architecture of GSM.
2. Explain the concept of handovers in relevance to GSM.
3. Draw the structure of GSM frame.
4. Discuss UMTS in detail.
5. What are the types of channels in GSM?

### **Section – C**

1. What is WLAN? Explain its features.
2. Discuss the protocol stack of Hiperlan.
3. Explain Mobile TCP.
4. Write short note on Bluetooth.
5. How does Mobile IP work?

### **Section – D**

1. Draw and discuss WAP protocol stack.
2. Explain the functions of data manager.
3. Explain the features of Palm OS.
4. Draw the architecture of Symbian OS.
5. What are drivers with respect to Windows CE.

# **OBJECTIVE QUESTIONS**

## **Section – A**

1. What are the effects of mobility on communication?
2. What is CDMA?
3. What is the efficiency of Slotted Aloha?
4. What is near-far terminal problem?
5. What is hidden terminal problem?

## **Section – B**

1. What are bearer services of GSM?
2. How many subsystems are there in GSM architecture? Name them.
3. What are the components of GSM?
4. Write the full form of
  - a. GSM
  - b. DECT
  - c. TETRA
  - d. LTE
5. List the features of LTE.

## **Section – C**

1. Name the different layers of 802.11 standard.
2. Write the four goals of MAC management in 802.11.4.
3. What is piconet?
4. What are the problems with Mobile IP?
5. What are the disadvantages of Mobile TCP?

## **Section – D**

1. Name a few operating systems compatible with WAP.
2. Write the full forms of
  - a. WAP
  - b. WDP
  - c. WML
  - d. WSP
  - e. WTP
3. Name WML Script libraries.
4. What is a movable chunk in Palm OS?
5. Write two advantages and disadvantages of Symbian OS.
6. Name the types of drivers available in Windows CE.