MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

Department of Computer Science and Engineering
Question Bank - Academic Year (2021-22)

Course Code & Course Name	: **19CSC14 & Mobile Computing**
Name of the Faculty	: **M.Buvaneswari**
Year/Sem/Sec	: **III / V / A**

Unit-I: Wireless Communication Fundamentals
Part-A (2 Marks)

1. Define the term Mobile Communication.

2. What are the applications of Mobile Computing?

3. List out the different signal propagation effects.

4. Define Multiplexing.

5. List out Various Multiplexing scheme in wireless transmission.

6. Define Modulation.

7. What are the various types of Modulation techniques available.

8. Classification of wireless MAC protocols.

9. Define Spread spectrum. List its types.

10. Define cellular systems.

Part-B (16 Marks)

1. List the various signal propagation effects and explain in detail. (16)

2. Explain in detail about Multiplexing. (16)

3. Describe modulation techniques. (16)

4. Explain the various spread spectrum techniques. (16)

5. Explain the various taxonomy of MAC Protocols. Differentiate various schemes (16)

Unit-II : Telecommunication Networks
Part-A (2 Marks)

1. List the limitations of IPv4 and how are they overcome by IPv6.

2. Why do Hidden and Exposed terminal problem arise?

3. Differentiate the functionalities of a foreign agent & Home agent?

4. What do you mean by encapsulation and decapsulation in the context of mobile IP? Explain why these are needed

5.   What is DHCP?

6.   What is Route Optimization?

7.   What is the purpose of HLR?

8.   What is DECT.

9.   Differentiate between FAMA and DAMA.

10. List out the functions of DAB and DVB.

Part-B (16 Marks)

1.   Explain the key mechanism of mobile IP with the help of a suitable schematic diagram   (16)
     and by using suitable examples. What are the disadvantages of mobile IP?

2.   Draw the Architecture of GPRS and explain its functions.   (16)

3.   Explain the architecture of GSM.   (16)

4.   Explain in detail about FAMA and DAMA.   (16)

5.   List out the difference between DAB and DVB and also explain in detail.   (16)

Unit-III : Wireless LAN
Part-A (2 Marks)

1.   List out the different subsystems of GSM?

2.   What are the services offered by GPRS?

3.   What is multicasting?

4.   What are the services provided by supplementary services?

5.   Define Handoff. What are its types?

6.   What are the information available in SIM?

7.   What is HIPERLAN.

8.   List out the various IEEE standards.

9.   Define the term Bluetooth.

10. Define MAC physical layer.

Part-B (16 Marks)

1.   Explain in detail about architecture of Wireless LAN.   (16)

2.   Discuss MAC Physical layer.   (16)

3.   Explain HIPERLAN.   (16)

4.   Discuss the protocol architecture of Bluetooth.   (16)

5.   Explain IEEE 802.11 standards.   (16)

Unit-IV : Mobile Network Layer
Part-A (2 Marks)

1. List the Characteristics of mobile Adhoc Network ?

2. What are the Applications of MANETs

3. Define Mobile IP.

4. Define Routing.

5. Compare DSDV & DSR protocols?

6. Difference Between Proactive & Reactive protocols

7. Write the Important steps in the operation of DSDV?

8. What is the concept of RTT?

9. Define DHCP.

10. What are the alternative metrics in mobile network layer.

Part-B (16 Marks)

1. Explain Mobile IP. (16)

2. Define the term DHCP. Explain it. (16)

3. Explain proactive routing protocol in detail. (16)

4. Explain the DSR routing procedure. (16)

5. List out the steps to find the routing procedure using DSDV and DSR protocol. (16)

Unit-V : Transport and Application Layers
Part-A (2 Marks)

1. Define TCP.
2. Define Fast – Retransmission.
3. What is snooping TCP.
4. Define I-TCP.
5. Define congestion control.
6. What is WAP.
7. List out the protocols in WAP.
8. What are the features of 4G network.
9. Define mobile multimedia.
10. Define time out freezing.

Part-B (16 Marks)

1. Explain traditional TCP. (16)

2. Explain the various improvements in TCP performance with diagram? How does it maintains end to end semantics? (16)

3.   Discuss the architecture of Wireless Application Protocol (WAP).   (16)

4.   List out the various generation in mobile network. Explain.   (16)

5.   Discuss about mobile multimedia networks.   (16)

Course Faculty   **HoD**