Wireless Technology (WT) Important Questions

Q1. Explain in detail the working of Forward Link and Backward Link CDMA System with a neat diagram. **(Module 1)**

Q2. What is Spread Spectrum? Explain FHSS & DSSS in detail with diag. **(Module 1)**

Q3. Explain the Multiple Access Techniques - FDMA, TDMA, CDMA, OFDMA with diagrams. **(Module 1)**

Q4. Describe the evolution of 1G to 5G and Compare it. **(Module 1)**

Q5. Draw and explain the GPRS Architecture in detail with neat diagram. **(Module 2)**

Q6. Explain in brief the UMTS Architecture and GSM Architecture. **(Module 2)**

Q7. What is Frequency Reuse Concept? Explain it with ex. & diagram. **(Module 2)**

Q8. Explain the Fixed Channel and Dynamic Channel Assignment. **(Module 2)**

Q9. Explain the Hard and Soft handoff and compare it with example. **(Module 2)**

Q10. Explain the Micro zone cell concept and Cell sectoring. **(Module 2)**

Q11. Explain the LTE / 4G network Architecture with its specifications. **(Module 2)**

Q12. Compare GSM, GPRS UMTS and LTE with suitable example. **(Module 2)**

Q13. Write a short note on CDMA 2000. What is LoRA and LoRaWAN? **(Module 2)**

Q14. Explain the Protocol Architecture of IEEE 802.11. **(Module 3)**

Q15. Explain the MAC and PHY layers of IEEE 802.11. **(Module 3)**

Q16. Explain the features and architecture of WiMax. **(Module 3)**

Q17. Explain WLL (Wireless Local Loop). **(Module 3)**

Q18. Interpret the architecture of MANET with its applications. **(Module 4)**

Q19. Summarize Zigbee Protocol stack with neat diagram. **(Module 4)**

Q20. Interpret Wireless Sensor Network Architecture. State its signficance **(Module 4)**

Q21. Interpret the architecture of Bluetooth with neat diagram. **(Module 4)**

Q22. Compare MANET and VANET and E-VANET with its architecture. **(Module 4)**

Q23. Differentiate Infrastructure based network and Adhoc network. **(Module 4)**

Q24. Explain Piconet and Scatternet with respect to Bluetooth. **(Module 4)**

Q25. Illustrate the steps involved in UMTS Security Process. **(Module 5)**

Q26. Illustrate WEP protocol in detail with diagram. State its significance. **(Module 5)**

Q27. Discuss the Threats and Challenges in wireless communication. **(Module 5)**

Q28. Draw the Bluetooth Security Architecture. Illustrate how Bluetooth is providing authentication & encryption with different security levels in each layer. **(Module 5)**

Q29. Illustrate the security in WPA2. Also, state it's features. **(Module 5)**

Q30. Draw and explain Cisco UWN lightweight AP and WLC Operation. **(Module 6)**

Q31. Draw and Illustrate Cisco Unified Wireless Network Architecture. **(Module 6)**

Q32. Describe the features of Cisco Unified Wireless Network. **(Module 6)**

Q33. Outline the method that supports mobility in CISCO Unified Wireless Network. **(Module 6)**

Q34. What do you mean by massive MIMO? **(Module 2)**

Q35. State the advantages, disadvantages and applications of Wireless Communication. **(Module 1)**

WT Module-Wise Weightage and Priority

Module 2 - Wide Area Wireless Networks | Weightage: (20 - 25 marks)

Module 4 - Wireless Personal Area Networks and Adhoc Networks |
Weightage: (20 - 25 marks)

Module 1 - Fundamentals of Wireless Communication | Weightage: (15 - 20 marks)

Module 3 - Wireless Metropolitan and Local Area Networks |
Weightage: (15 - 20 marks)

Module 5 - Wireless Network Security | Weightage: (5 - 10 marks)

Module 6 - Wireless Network Design Considerations | Weightage: (5 - 10 marks)