

Q.2 a. Explain the first, second and third generation wireless system and services in brief.

Answer: Page Number 1-8 of Text Book

b. Discuss wireless MANs, LANs and PANs.

Answer: Page Number 24 of Text Book

c. Compare WSN (Wireless Sensor Network) and MANET.

Answer: Page Number 22 of Text Book

Q.3 a. In a cellular system, diffraction, reflection and direct path take a different amount of time for the signal to reach a MS. How do you differentiate and use these signals.

Answer: Page Number 57-58 of Text Book

b. Find the linear block encoder G and all possible code words if code generator polynomial $S(x) = 1 + x + x^3$ for a $(7, 4)$ code, if received codeword's is 1001001, find the correct decoded message.

Answer: Page Number 82 of Text Book

Q.4 b. Explain in detail, co-channel and adjacent channel interference. How it will affect the system capacity?

Answer: Page Number 114 of Text Book

Q.5 a. Compare SDMA, CDMA & TDMA in cellular system.

Answer: Page Number 156, 148, 146 of Text Book

b. What are the specific advantages of static channel allocation over dynamic channel allocation strategies?

Answer: Page Number 170 of Text Book

Q.6 a. What do you mean by handoff? Explain the different Hand off strategies, required to make the Hand off efficient.

Answer: Page Number 195 of Text Book

b. What are the differences between orbital and elevation angles of a satellite?

Answer: Page Number 267 of Text Book

Q.7 a. How do you compare AMPS and GSM system in terms of coverage area, transmitting time, power and error control? Explain.

Answer: Page Number 221, 229 of Text Book

b. Explain the various logical channels in IS-95.

Answer: Page Number 243 of Text Book

Q.8 a. What are the differences between cellular and mobile Adhoc Networks.

Answer: Page Number 243 of Text Book

b. How do you use a 'data centric' approach in a sensor network?

Answer: Page Number 334 of Text Book

c. What do you mean by proactive and reactive routing in Mobile-Adhoc Networks? Explain on demand routing with neat diagram.

Answer: Page Number 304 of Text Book

Q.9 Write short notes on.

(i) ALOHA

(ii) Basic function of smart antennas.

Answer: Page Number 127, 423 of Text Book

TEXT BOOK

Introduction to Wireless and Mobile Systems, Second Edition (2007), Dharma Prakash Agrawal and Qing-An Zeng, Thomson India Edition.