Q.2 b. List some perspective application areas for sensor networks.

Answer: Page Number 23 of Text Book

c. Define Poisson distribution, Geometric distribution and Binomial distribution.

Answer: Page Number 33-34 of Text Book

Q.3 a. What do you mean by fading? Explain the fading effects due to multipath time delay spread.

Answer: Page Number 72 of Text Book

b. Explain linear block code and cyclic code with example.

Answer: Page Number 80, 85 of Text Book

Q.4 a. Determine the maximum throughput that can be achieved using Aloha and slotted Aloha Protocols.

Answer: Page Number 129-130 of Text Book

b. What do you mean by Interference? Explain the CCI and ACI in terms of system capacity.

Answer: Page Number 114-115 of Text Book

Q.5 a. What is the fundamental difference in concept for calculating the capacity of CDMA cellular system over FDMA system?

Answer: Page Number 144-145 of Text Book

b. Explain with neat sketch, Overlapped cells- based channel allocation.

Answer: Page Number 179 of Text Book

Q.6 a. Explain Home Agents, Foreign Agents & Mobile IP.

Answer: Page Number 201 of Text Book

b. Explain GEO satellite beam footprint.

Answer: Page Number 264-265 of Text Book

Q.7 a. Draw the architecture and signalling system for the GSM and Explain each block.

Answer: Page Number 229 of Text Book

b. Explain the IMT-2000 system and AMPS.

Answer: Page Number 223, 249 of Text Book

Q.8 a. What is the basic concept of MANET and explain the architecture of MANET.

Answer: Page Number 304-305 of Text Book

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b. What are the difference between wireless sensor networks and fixed wireless sensor networks?

Answer: Page Number 334, 339 of Text Book

- **Q.9** Write short note on any **TWO**:
 - (i) Directional and smart antennas
 - (ii) Ultra Wideband Technology
 - (iii) WPAN 'S'

Answer: Page Number 423, 399, 377 of Text Book

Text Book

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

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