QP Code : 30406

(3 hours)

(80 marks)

Note: 1) Question 1 is compulsory.
2) Attempt any three from remaining questions
3) Assume suitable data wherever necessary.

Q1. A) Explain sensor node hardware component?   (10 marks)

   B) Explain Spread-Spectrum Communication in detail   (10 marks)

Q2. A) Explain in detail GPRS Routing Protocol? List its advantages?   (10 marks)

   B) Explain in detail IEEE 802.15.4 MAC protocol.   (10 marks)

Q3. A) Discuss ARQ protocol in detail.   (10 marks)

   B) Explain in detail the design principles for wireless sensor network. (10 marks)

Q4. A) Explain about transport layer and QoS in wireless sensor networks. (10 marks)

   B) Explain in detail mathematical basics for lateration problem used for localization
and positioning in WSN?   (10 marks)

Q5. A) Explain in detail the distributed source coding with an example and also show the co-

    relation via hamming distance.   (10 marks)

   B) Explain in detail AODV routing protocol.   (10 marks)

Q6 Write short notes   (20 marks)

   a. LEACH

   b. GEM

   c. WSN Link layer security framework

   d. HTRS