QP Code : 6166

(3 hours) [Total Marks: - 80]

N.B. (1) Question No. 1 is **Compulsory**.

(2) Answer any **three** out of remaining **five** questions.

(3) Assumptions made should be **clearly** stated.

(4) **Figures** to the **right** indicate **full** marks.

Q.1 Attempt any four: - (20)

i. Explain types of services available in wireless communication
ii. Explain WAP Advantage and Disadvantages.
iii. Give Introduction to 3G & 4G.
iv. Give importance of WirelessHART adaptor.
v. Explain FDMA principle

Q.2 a) Explain Bandwidth concept, Multipath propagation, spectrum limitations, Present scenario in Wireless Communication Systems (10)

b) What is Peer-to-Peer Communication with WirelessHART? Explain using 2 different Scenario. (10)

Q.3 a) Explain Quadrature Phase shift keying, and Differential quadrature phase shift keying (10)

b) Explain Spread spectrum systems and Effects of multipath propagation on CDMA, OFDM (10)

Q.4 a) Explain WAP Architecture in detail (10)

b) Explain Control with *Wireless*HART with respect to:- (10)

i. Sampling Interval
ii. Jitter and Latency Concept

Q.5 a) Explain in detail Bluetooth Protocol Stack (10)

b) Explain System Redundancy with WirelessHART (10)

Q.6 Write short note on :- (Any four) (20)

i. Ultra Wide Band
ii. imode versus WAP
iii. Gaussian minimum shift keying
iv. Difference between WAP & WWW
v. Cordless telephony

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