

**Note: 1. Q. No1 is compulsory**

**2. Solve any three questions out of the remaining five**

**3. Figures to right indicate full marks**

**4. Assume suitable data where necessary**

**Q.No1 Solve any four**

(20)

- a) Explain the different features of VANET and E-VANET
- b) Write note on UMTS security.
- c) Compare FDMA, TDMA and CDMA
- d) Outline the method that supports mobility in CISCO Unified Wireless Network
- e) Differentiate between FHSS and DSSS.

**Q.2**

- a. Draw and explain UMTS network architecture and compare GSM and UMTS (10)
- b. Draw and explain the GSM time slot hierarchy. (10)

**Q.3.**

- a. Give the significance of WEP protocols. What are the features of WPA2 (10)
- b. Draw and explain the architecture of Cisco UWN with its features. (10)

**Q.4**

- a. Explain the architecture of WSN protocol and discuss applications of WSN. (10)
- b. Draw and explain LTE network architecture in detail. (10)

**Q.5**

- a. State different features of Zigbee and explain its protocol stack. (10)
- b. Explain 4G network architecture with its specifications. (10)

**Q.6**

- a. Draw and explain OFDMA technique for multiplexing. (10)
- b. Draw and explain system architecture of IEEE802.11. Differentiate between IEEE802.11 and IEEE802.16. (10)