

TE sem/VI/IT / C Scheme NOV - 2025 Date 05/12/2025 Q.P. -

Q.P. 94350

(VI)

(Time: 3 Hours)

(Total Marks: 80)

- N.B. 1. Question No. 1 compulsory.
2. Attempt any three out of remaining five questions.
3. Figures to the right indicate full marks.
4. Draw neat diagram wherever necessary.

- Q1 Attempt any **Four** of the following: 20
- a. Outline the method that supports mobility in CISCO Unified Wireless Network. 5
 - b. Explain the different features of VANET and E-VANET. 5
 - c. State the advantages of TDMA over FDMA. 5
 - d. Differentiate between FHSS and DSSS. 5
 - e. Write note on UMTS security. 5
- Q2 Attempt the following:
- a Write short note on: EDGE for 2.5G GSM and IS-136. 10
 - b Draw and explain the GSM time slot hierarchy. 10
- Q3 Attempt the following:
- a Explain the architecture of Bluetooth. Explain active, hold and park mode of operations in Bluetooth. 10
 - b Draw and explain the architecture of Cisco UWN with its features. 10
- Q 4 Attempt the following:
- a Draw and explain MANET. What are the design challenges in MANET? 10
 - b Draw and explain LTE network architecture in detail. 10
- Q5 Attempt the following:
- a Draw and explain wireless sensor network communication architecture. 10
 - b Explain 4G network architecture with its specifications. 10
- Q6 Attempt the following:
- a With the help of neat diagram, explain the digital signature process. 10
 - b Draw and explain OFDMA technique for multiplexing. 10
