Reg. No. : | | | | | | | | | | | | |

Question Paper Code: 1067169

B.E. / B.Tech. DEGREE EXAMINATIONS, NOV/ DEC 2024
Sixth Semester
Electronics and Communication Engineering
EC 8004 – WIRELESS NETWORKS
(Regulation 2017)

Time: Three Hours Maximum: 100 Marks

Answer ALL questions

PART – A (10 x 2 = 20 Marks)

1. What are the advantages of Wireless LAN?
2. List the features of Zigbee.
3. What is a Care of address in Mobile–IP?
4. What is tunneling?
5. What are the functions of Radio Network Control (RNC)?
6. Write the features of CDMA-2000.
7. Mention the limitations of GPRS.
8. List the difference between MMDS and LMDS?
9. Write the difference between 3G and 4G networks.
10. Give the various smart antenna techniques used in wireless networks.

PART – B (5 x 13 = 65 Marks)

11. (a) Explain in detail about the IEEE 802.11 protocol architecture and bridging with other networks. (13)

(OR)

(b) Describe the user scenario architecture and protocol stack of Bluetooth technology. (13)

12. (a) How can tunneling and encapsulation be performed in Mobile IP? Explain. (13)

(OR)

(b) Discuss in detail how packets are routed in MANET using Dynamic source routing algorithm. (13)

13. (a) Draw the architecture for UMTS core network and explain its working. (13)

(OR)

(b) Discuss the principle of TD-CDMA and TD-SCDMA. (13)

14. (a) Elaborate on the 'Internetworking architecture' used for connecting WLAN with GPRS system. (13)

(OR)

(b) Explain about Multichannel Multipoint Distribution System in detail. (13)

15. (a) Explain the key challenges faced by 4G networks and also propose solutions of how to mitigate those challenges. (13)

(OR)

(b) Explain in detail about Adaptive modulation and Coding with time slot scheduler in detail. (13)

PART – C (1 x 15 = 15 Marks)

6. (a) Draw the architecture of Wireless HART and explain the principle and applications. (15)

(OR)

(b) Draw the IMS architecture and explain the principle. (15)

--------xxxx--------