

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)  
B.Tech.Sem - VIII ELECTRONIC : WINTER- 2022  
SUBJECT : WIRELESS NETWORKS

Day : Monday

Time : 02:30 PM-05:30 PM

Date : 28-11-2022

W-13403-2022

Max. Marks : 60

**N.B. :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data wherever necessary.
- 4) Use of calculator is **ALLOWED**.

Q.1 Discuss free space propagation model for mobile communication. (10)

OR

Q.1 What do you mean by wireless networks? Explain different generations of wireless networks. (10)

Q.2 Demonstrate the importance of cell splitting and sectoring in networks. Also mention the importance of frequency reuse in cellular networks. (10)

OR

Q.2 Describe the co-channel interference and adjacent channel interference. Describe the techniques to avoid interference. (10)

Q.3 Describe the different interface connections in a GSM network in detail. (10)

OR

Q.3 How GSM call is set up? Explain the procedure step by step. (10)

Q.4 What are the issues in CDMA network planning? Why power control mechanism is important in wireless network? (10)

OR

Q.4 Describe the following: (10)

- a) Walsh codes
- b) Variable free OVSF

Q.5 What is meant by MIMO system? Describe any two diversity techniques in MIMO system. (10)

OR

Q.5 With the help of neat diagram explain the architecture of GPRS. (10)

Q.6 Explain WiFi and WiMax technology in detail. (10)

OR

Q.6 Explain mobile TCP. How does a supervisory host send TCP packets to the mobile node and to a fixed TCP connection? (10)

\* \* \* \* \*