

**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

**(Autonomous Institution – UGC, Govt. of India)**

IV B.Tech - II Semester Regular/Supplementary Examinations, April 2023

## Wireless Communications & Networking

(ECE)

<b>Roll No</b>								
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**Time: 3 hours****Max. Marks: 70**

**Note:** This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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## SECTION-I

- 1**     **A**     Describe the evolution of mobile radio communications.     **[7M]**  
        **B**     Explain the function of cordless telephone system.     **[7M]**

OR

- 2**     **A**     What is the function of Wireless Local Loop? Explain.     **[7M]**  
        **B**     Write short notes on Wireless Local Area Networks and Bluetooth.     **[7M]**

## SECTION-II

- 3** Derive received power equation for two ray ground reflection model. **[14M]**
- OR**

OR

- 4**     **A**     What is diffraction? Describe about Knife-edge Diffraction Model. **[8M]**  
          **B**     Define reflection and Brewster Angle. **[6M]**

### SECTION-III

- 5**     **A**   Explain about the impulse response model of multipath channel. [7M]  
       **B**   Define Coherence Bandwidth, Doppler Spread and Coherence Time. [7M]

OR

- 6**     **A**     Define fading. What are the parameters influences the small scale fading?     **[8M]**  
        **B**     Explain about various parameters of mobile multipath channels.     **[6M]**

## SECTION-IV

- 7    **A**    Describe the architecture of 802.11.    [7M]  
       **B**    Explain the physical layer characteristics of 802.11.    [7M]

OR

- 8**     **A**     What is the significance of Wi-Fi Protected Access. **[7M]**  
        **B**     Describe the baseband specification of Blue tooth. **[7M]**

## SECTION-V

- 9** Explain the system architecture of GPRS. List the applications. **[14M]**

OR

- 10**    **A**    Write short notes on HIPERLAN and HIPERLAN-2. **[10M]**  
       **B**    What are the features of Wireless ATM? **[4M]**

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