R17

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)
IV B.Tech - II Semester Supplementary Examinations, April 2023
Wireless Communications & Networks
(ECE)

Roll No									

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.

***

SECTION-I

1 Explain briefly about MODERN WIRELESS COMMUNICATION SYSTEMS.   **[14M]**

OR

2 a) Explain Wireless local loop (WLL) and LMDS   **[7M]**
  b) Explain and compare common wireless communication systems   **[7M]**

SECTION-II

3 a) Explain Ground Reflection (Two-Ray) Model   **[7M]**
  b) Explain Wideband PCS Microcell Model   **[7M]**

OR

4 a) Explain Geometry, Knife edge Diffraction Model   **[7M]**
  b) Explain Attenuation Factor Model   **[7M]**

SECTION-III

5 a) Explain Clarke's model for flat fading   **[7M]**
  b) Explain Model of a multipath channel and relationship between bandwidth **[7M]**
      and received power.

OR

6 a) Explain factors influencing small scale fading,   **[7M]**
  b) Explain Time Dispersion Parameters of Multipath channels.   **[7M]**

SECTION-IV

7 a)Explain about the IEEE802.11 protocol architecture and services   **[7M]**
   b) Explain 802.11 Physical Layer   **[7M]**

OR

8 a)Explain Blue tooth Baseband and Link Manager Specification   **[7M]**
   b) Explain Wi-Fi Protected Access   **[7M]**

SECTION-V

9 a) Distinguish **HIPERLAN-1and 802.11 WLAN.**   **[7M]**
   b) Draw and explain the architecture and layers of HIPERLAN.   **[7M]**

OR

10 a) Explain data oriented CDPD network   **[7M]**
   b) Write a short notes GSM and GPRS   **[7M]**

***