



R20 Regulation

Subject code: 3E8DL

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VIII Semester Regular Examinations, April 2024

WIRELESS COMMUNICATIONS AND NETWORKS (ECE)

Maximum Marks: 70

Date: 27.04.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		CO	Bloom Tx
1	Write some examples for wireless communication system.	1	L1
2	Write a short note on paging systems?	1	L1
3	Define Co-channel Interference.	2	L1
4	Explain the concept of frequency reuse	2	L2
5	List any two differences between wireless and fixed telephone networks	3	L1
6	What protocol is used in X 25?	3	L1
7	List the advantages and disadvantages of WLAN.	4	L1
8	Define IEEE 802.11?	4	L1
9	What are the spread spectrum techniques which were used in the original IEEE 802.11 standard	5	L1
10	Define the Bluetooth.	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	A. Briefly explain about paging systems. [5M] B. Explain the modern wireless communication systems. [5M]	1	L2 L2
OR			
12	Explain about Bluetooth and PAN. [10M]	1	L2
13	Explain the various types of Handoff processes available. [10M]	2	L2
OR			
14	A. Discuss briefly about frequency reuse. [5M] B. Write short notes on channel assignment strategies. [5M]	2	L2 L2
15	Discuss in detail about ISDN architecture. Give its applications. [10M]	3	L2
OR			
16	Discuss in detail about X.25 protocol with appropriate illustrations. [10M]	3	L2
17	Compare infrared LANs, spread spectrum LANs, narrowband microwave LANs. [10M]		L2

	OR		
18	A. Describe WLAN standards. [5M] B. Draw the configuration of IEEE802.11 architecture. [5M]	4	L2 L2
19	Explain in detail about different specifications of IEEE 802.15. [10M]	5	L2
	OR		
20	A. List and explain L2CAP logical channels. [5M] B. When does a WLAN become a personal area network (PAN)? Explain. [5M]	5	L2 L2