

PRN No.	
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PAPER CODE	U325-293 (ESE)
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**(AY:2024-25) May 2025 (ENDSEM) EXAM
TY (SEMESTER - II)**

COURSE NAME:
Wireless Networks

Branch: E&TC

COURSE CODE : ETUA32203

(T.Y PATTERN 2020R1)

Time: [1Hr 30 Min]

[Max. Marks: 40]

(*) Instructions to candidates:

- 1) **Figures to the right indicate full marks. Use of scientific calculator is allowed**
- 2) **Use suitable data wherever required**
- 3) **All questions are compulsory. Solve any two sub question each from Questions 1 , 2 ,3 and 4**

Q. No.	Question Description	Max. Marks	CO mapped	BT Level
Q.1	a) Explain basic cellular network architecture with block diagram.	[5]	CO1	BT-2
	b) Explain in detail the Hand -off process in cellular system.	[5]	CO1	BT-2
	c) Describe the various factors which affect wireless system design.	[5]	CO1	BT-2
Q2	a) State the following parameters of 802.11b protocols. i)max data rate ii) Frequency band iii)type of modulation iv) Range	[5]	CO2	BT-2
	b) Describe the key issues of Wi-Fi network.	[5]	CO2	BT-2
	c) Distinguish between FHSS and DSSS techniques.	[5]	CO2	BT-2
Q3	a) Illustrate various UMTS services used in 3G network	[5]	CO3	BT-2
	b) Explain the concept of Carrier Aggregation in LTE and its significance in enhancing data rates.	[5]	CO3	BT-2
	c) How does 5G reduce latency, and what are its implications for the Internet of Things (IoT)?	[5]	CO3	BT-2

Q4	a) List out different security counter measures and describe any two counter measures in detail.	[5]	CO4	BT-2
	b) Explain different hacking techniques used in wireless network.	[5]	CO4	BT-2
	c) Compare WEP and WPA wireless security techniques.	[5]	CO4	BT-2

BT-1:Remember
BT-4: Analyze

BT-2:Understand
BT-5: Evaluate

BT-3: Apply