



(For those admitted in June 2021 and later)

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
IV	PART-III	CORE ELECTIVE	U21EL4E2A	ADVANCED COMMUNICATION SYSTEMS

Maximum: 75 Marks

1

CO2	K3	12a.	Illustrate the function of coherent ASK detector. (OR)
CO2	K3	12b.	Describe the probability error of ASK and FSK.
CO3	K4	13a.	State and explain the Kepler's law. (OR)
CO3	K4	13b.	Discuss global positioning system and its applications.
CO4	K4	14a.	Explain the concept of frequency reuse. (OR)
CO4	K4	14b.	Analyze how will improve coverage and capacity in cellular communication.
CO5	K5	15a.	Evaluate the performance of CDMA technology. (OR)
CO5	K5	15b.	Explain the difference between wireless and fixed telephone networks.

Course Outcome	Bloom's K-level	Q. No.	<p align="center">SECTION – C (5 X 8 = 40 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)</p>
CO1	K3	16a.	Explain in detail the function of differential pulse code modulation with neat diagram. (OR)
CO1	K3	16b.	Explain the function of delta modulation and its drawback.
CO2	K4	17a.	Describe the operation of non-coherent FSK with neat sketch. (OR)
CO2	K4	17b.	Describe the operation of coherent reception of QPSK with neat sketch.
CO3	K4	18a.	Discuss in detail about transponders in satellite communication. (OR)
CO3	K4	18b.	Evaluate the efficiency of Direct-to-Home (DTH) broadcasting systems.
CO4	K5	19a.	Briefly explain the concept of hand off strategies and explain its types. (OR)
CO4	K5	19b.	Explain in detail the cell splitting and cell sectoring concept in cellular communication.
CO5	K5	20a.	Compare FDMA with TDMA. (OR)
CO5	K5	20b.	Draw the architecture of GSM and explain in detail.