

Enroll No

Q.P. Code
UT 3066

Unit Test -I (2025-26)

TY. B.Tech.-Electronics & Telecommunication Engineering

Course Code: ECMD301

Course Name: Advanced Communication Systems

Day & Date: Thursday 14/10/2025

Time: 3:45 To 4:45

Max Marks- 25

- Instructions:**
- 1) All questions are compulsory.
 - 2) Figures in rounded () brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.
 - 3) CO is the index number of the Course Outcome statement.
 - 4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.
 - 5) Assume suitable data if necessary.
 - 6) Use of non-programmable calculators is allowed

Attempt the Following

			Marks	BT Level	COs
Q.1	A	Define wave polarization. Explain the need and types in detail. (Definition-2 Marks, Need-2 Marks, Types-3 Marks)	7	2	CO1
	B	Explain electromagnetic wave propagation and its types (Wave propagation- 2 Marks, Types-4 Marks)	6	2	CO1
OR					
	B	Explain the following terms <ul style="list-style-type: none"> • Wave characteristics • Electromagnetic spectrum (Wave characteristic -4 Marks, EM Spectrum-2 Marks)	6	2	CO1
Q.2	A	Describe the radiation pattern of the antenna and its types in detail. (Definition-2 Marks, Types-4 Marks)	6	2	CO2
	B	Explain the following parameters of an antenna <ul style="list-style-type: none"> • Half power beam width • Beam efficiency (Each- 3 Marks X 2= 6 Marks)	6	2	CO2
OR					
	B	Explain the following parameters of an antenna <ul style="list-style-type: none"> • Beam Solid Angle • Resolution (Each- 3 Marks X 2= 6 Marks)	6	2	CO2


