

U. G. M. I. T, RAYAGADA

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

ACADEMIC LESSON PLAN FOR SUMMER SEMESTER-2023

NAME OF THE FACULTY	Smita Patnaik	DEPT	ETC		
SEMESTER	6th	SUBJECT	Advance Communication Engineering		
NO. OF PERIODS PER WEEK	5	TOTAL PERIODS	75		
END SEMESTER EXAM	80	CLASS TEST	20		
TOTAL MARKS	100				

WEEK	PERIOD	UNIT/ CHAPTER	TOPIC TO BE COVERED
1st	1st	Radar and Navigation Aids	Introduction about radar system
	2nd		Block diagram of radar system and types of radar
	3rd		Derivation of Radar range Equation
	4th		Continue wave radar with block diagram and its application
	5th		Aircraft landing system
2nd	1st		Moving target indicator with block diagram and its uses
	2nd		GPS system
	3rd		Navigation and satellite navigation system
	4th		Applications of radar system
	5th		Radar aids to navigation
3rd	1st	Satellite communication	satellite communication system
	2nd		low earth orbit, midium earth orbit and geo
	3rd		general structure of satellite communication system
	4th		Block diagram of earth station
	5th		frequency band of satellite communication system
4th	1st		Direct broadcast system, Multiple access
	2nd		keplers law
	3rd		multiple access and types
	4th		Definition of optical fiber communication
	5th		VSAT working principle
5th	1st		GPS receiver
	2nd		Time division multiple access
	3rd		DBS
	4th		uplink and downlink
	5th		optical transmitter link satellite
6th	1st	Optical Fiber communication	optical communication
	2nd		advantage and disadvantages of FOCS
	3rd		electro magnetic frequency
	4th		Ray theory
	5th		optical fiber construction
7th	1st		critical and acceptance angle
	2nd		Block diagram of FOCS
	3rd		Types of optical fiber
	4th		Laser and Led diode
	5th		pin and Apd diode
	1st		WDM principles

8th	2nd	Telecommunication System	Application of FOCS	
	3rd		Attention and dispersion	
	4th		Graded index and step index	
	5th		Military and industrial applications	
9th	1st		Telephone set	
	2nd		Function of switching system	
	3rd		space and time switching	
	4th		call procedures	
	5th		PBX and EPABX	
10th	1st		Unit of power measurements	
	2nd		internet protocol telephone	
	3rd		working of internet telephone	
	4th		Question and answer discussion	
	5th		Revision	
11th	1st		Data communication	concept of data communication
	2nd	architecture of data communication		
	3rd	protocol and standard of data communication		
	4th	data communication circuit		
	5th	types of transmission		
12th	1st	transmission modes		
	2nd	data communication codes		
	3rd	error control and error detection		
	4th	MODEM and block diagram		
	5th	voice band modem		
13th	1st	Wireless communications		concept of cellphone
	2nd			frequency reuse channel assignment strategy
	3rd			handsoff co channel interface
	4th			cell splitting and sectoring
	5th			wireless system and its standard
14th	1st		discuss GSM service	
	2nd		CDMA channel	
	3rd		architecture of GPRS	
	4th		Mobile TCP	
	5th		Mobile IP	
15th	1st		WAP	
	2nd		SMS and MMS	
	3rd		Generation of network	
	4th		Smart phones concept	
	5th		Block diagram of Smartphone	