

LESSON PLAN

DISCIPLINE: Electronics and Telecommunication Engineering		SEMESTER: 6 TH	NAME OF THE TEACHING FACULTY: Er. Nirmala Nanda Dhal
SUBJECT: Th. 1 – ADVANCED COMMUNICATION ENGG.		NO. OF DAYS/ PERIODS PER WEEK CLASS ALLOTTED: 5	Semester From Date: 13.02.2023 To Date: 23.05.2023 No. of Weeks: 15
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, medium 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		Kepler's 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		
8th	1st	WDM principles		
8th	2nd	Optical Fiber communication		Application of FOCS
	3rd			Attention and dispersion
	4th			Graded index and step index
	5th			Military and industrial applications
9th	1st	Telecommunication System	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		handoff 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