VIKASH INSTITUTE OF TECHNOLOGY, BARGARH

LESSON PLAN

Semester:6TH	**Year:**	**Course: B.Tech**
	Sub:ADC	**Total Credit: 03**
Branch : EEE	**Sub Code :REE6C001**	
Name of the Faculty:	**Dr.Girish Padhan**	
Designation :	**HOD & Prof. in CSE**	
Department :	**COMPUTER SC.&ENGG**	
Session:-	**2024-25**	
Recommended Books:-	**Text book**:	
(1)JohnG.Proakis,M.Salehi,CommunicationSystemsEngineering,2nded.New Delhi, India. PHI Learning Private Limited, 2009. (2)	**1.JohnG.Proakis,M.Salehi,CommunicationSystemsEngineering,2nded.New Delhi, India. PHI Learning Private Limited, 2009.**	
	2. R.PSinghandS.DSapre,CommunicationSystemsAnalog&Digital,2nded.New Delhi, India. Tata McGraw Hill Education	
	Reference Books:	
	1.JohnG.Proakis,M.Salehi,CommunicationSystemsEngineering,2nded.New Delhi, India. PHI Learning Private Limited, 2009.	
	2. R.PSinghandS.DSapre,CommunicationSystemsAnalog&Digital,2nded.New Delhi, India. Tata McGraw Hill Education	

Sl. No.	Lecture No.	Topics to be covered	No. of Classes
		MODULE-1(Introduction)	
1	Lecture-01	Introduction: Elements of an Electrical Communication System	**8**
2	Lecture-02	CommunicationChannels and their Characteristics	
3	Lecture-03	Mathematical Models for Communication ChannelsFrequency domain analysis of signals and systems	
4	Lecture-04	Fourier series,Fourier Transforms	
5	Lecture-05	Power and Energy	
6	Lecture-06	Sampling and Band limited signals	
7	Lecture-07	Band pass signals	
8	Lecture-08	Filter and signal	
		MODULE-2:-Analog signal transmission and reception	
9	Lecture-09	Introduction to modulation, Amplitude Modulation (AM)	**3**
10	Lecture-10	Angle Modulation	
11	Lecture-11	Radio and Television broadcasting	
		MODULE-3:- Pulsemodulationsystems:Pulseamplitudemodulation	
12	Lecture-12	PCM SYSTEM,BLOCK DIAGRAM	8
13	Lecture-13	PulseTime Modulation	
14	Lecture-14	mudulation/demodulation	
15	Lecture-15	Intersymbol interference, Eyepatterns,Equalization,	
16	Lecture-16	Companding, Time Division Multiplexing of PCM signals,	
17	Lecture-17	Line codes, Bandwidth of PCM system, Noise in PCM systems.	
18	Lecture-18	advantages/disadvantages	
19	Lecture-19	application/drawbacks	
		MODULE-4(Delta Modulation (DM)	
20	Lecture-20	Limitations of DM, Adaptive Delta Modulation	4
21	Lecture-21	Noise in Delta Modulation	
22	Lecture-22	Comparison between PCM and DM,	
23	Lecture-23	Delta or Differential PCM (DPCM), S-Ary System.	

Signature of Faculty Member **Signature of HOD**

PRINCIPAL