



ARSD College, University of Delhi

Model Course Handout/Lesson Plan

Course Name : B.Sc. (H) Electronics Lab						
Semester	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Credit (C)
VI	32511608	Communication Electronics			4	2
Teacher/Instructor(s)		Dr. Nisha Jha				
Session		2021-22				

Course Description:

Course Learning Outcomes

- Understand basic elements of a communication system.
- Analyze the baseband signals in time domain and in frequency domain.
- Build understanding of various analog and digital modulation and demodulation techniques.
- Prepare the technical report on the experiments carried.

Communication Electronics Lab (Hardware and Circuit Simulation Software)

List of Experiments:

1. Study of Amplitude Modulation and Demodulation
2. Study of Frequency Modulation and Demodulation
3. Study of Single Side Band Modulation and Demodulation
4. Study of AM Transmitter and Receiver
5. Study FM Transmitter and Receiver
6. Study of Pulse Amplitude Modulation
7. Study of Pulse Width Modulation
8. Study of Pulse Position Modulation
9. Study of Pulse Code Modulation
10. Study of Delta Modulation
11. Study of Adaptive Delta Modulation

Details of the Lab Course		
Session	Name of Experiment	Contact Hours
1	Study of Amplitude Modulation and Demodulation	4
2	Study of Frequency Modulation and Demodulation	4
3	Study of Single Side Band Modulation and Demodulation	4
4	Study of AM Transmitter and Receiver	4
5	Study FM Transmitter and Receiver	4
6	Study of Pulse Amplitude Modulation	4
7	Study of Pulse Width Modulation	2
8	Study of Pulse Position Modulation	2
9	Study of Pulse Code Modulation	2
10	Study of Delta Modulation	4
11	Study of Adaptive Delta Modulation	4
	(Circuit Simulation Software)	
12	Study of Amplitude Modulation and Demodulation	2
13	Study of Frequency Modulation and Demodulation	2
14	Study of Single Side Band Modulation and Demodulation	2
15	Study of AM Transmitter and Receiver	2
16	Study FM Transmitter and Receiver	2
17	Study of Pulse Amplitude Modulation	2
18	Study of Pulse Width Modulation	2
19	Study of Pulse Position Modulation	2
20	Study of Pulse Code Modulation	2
21	Study of Delta Modulation	2
22	Study of Adaptive Delta Modulation	2
		60
Suggested Books:		
Sl. No.	Name of Authors/Books/Publishers	Year of Publication/Reprint
1.	Electronic communication systems- Kennedy, 3rd edition, McGraw international publications	
2.	Principles of Electronic communication systems – Frenzel, 3rd edition, McGraw Hill	
3.	Communication Systems, S. Haykin, Wiley India	2006
4.	Advanced electronic communications systems – Tomasi, 6th edition, PHI.	
5.	Communication Systems: Analog and Digital-R. P. Singh and S. D. Sapre, Tata McGraw Hill	2007

Evaluation Scheme:

No.	Component	Duration	Marks
1.	Internal Assessment		25
	• Quiz/Viva		
	• Observation & Record		
	• Attendance		
• Model Exam			
2.	End Semester Examination	3 hr	50 (25 I.A +25 Practicals)