

Name of Faculty : **Rajesh Kumar**

Branch : **Electronics & Communication Engg.**

Semester : **5th**

Subject : **Audio Video Systems**

Lesson Plan Duration : **15 Weeks**

Work Load (Lecture /Practical) per week in hours: Lecture: 3 Practical: 3

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 st	1 st	Introduction to Audio Systems	1 st	Introduction to Lab Equipment
	2 nd	Introduction to Microphones and Loudspeakers		
	3 rd	Carbon microphone		
2 nd	4 th	Moving coil microphone	2 nd	To plot the directional response of a Microphone
	5 th	Cordless microphone		
	6 th	Direct radiating loudspeaker		
3 rd	7 th	Horn loudspeaker	3 rd	Revision
	8 th	Multi-speaker system		
	9 th	Optical Sound recording		
4 th	10 th	Revision and Problem Solving	4 th	To plot the directional response of a Loud Speaker
	11 th	UNIT-2 Introduction to Digital Audio Fundamentals		
	12 th	Audio as Data and Signal		
5 th	13 th	Digital Audio Processes Outlined	5 th	Revision
	14 th	Revision and Problem Solving		
	15 th	Time Compression and Expansion.		
6 th	16 th	Revision and Problem Solving	6 th	To study public address system and its components.
	17 th	Class Test		
	18 th	UNIT-3 Elements of TV communication system		
7 th	19 th	Scanning and its need,	7 th	Revision
	20 th	Need of synchronizing and blanking		

	21 st	VSB		
8 th	22 nd	Composite Video Signal	8 th	To test color TV using pattern generator.
	23 rd	Primary, secondary colours		
	24 th	Concept of Mixing		
9 th	25 th	Colour Triangle	9 th	Revision
	26 th	Camera tube		
	27 th	PAL TV Receiver		
10 th	28 th	NTSC (brief comparison)	10 th	To perform fault identification in Colour TV.
	29 th	PAL, SECAM (brief comparison)		
	30 th	Class Test		
11 th	31 st	UNIT-4 Introduction to Digital Video, Compression Techniques and Standards	11 th	Revision
	32 nd	Digital Video		
	33 rd	The RGB and YUV Representation of		
12 th	34 th	The Need for Compression	12 th	Installation of Dish Antenna for best reception.
	35 th	How compression works		
	36 th	Compression formats for video - MPEG-x format, H.26x format		
13 th	37 th	UNIT-5 Introduction to Digital Television-	13 th	Revision
	38 th	Digital satellite television		
	39 th	Direct-To-Home(DTH) satellite television		
14 th	40 th	Digital Terrestrial Television(DTT)	14 th	Installation of CCTV system.
	41 st	Introduction to :Video on demand, CCTV. CATV with optical fibre.		
	42 nd	Class Test		
15 th	43 rd	UNIT-6 Basic block diagram of LCD	15 th	Revision
	44 th	Basic block diagram of LED Television		
	45 th	Comparison of LED and LCD		