

LESSON PLAN

Subject: Consumer Electronics **Semester:** Fifth **Branch:** ET&T

Unit Number	Name of the Topic	No of Class Required	Remarks
Unit 1.0 Audio Systems	1.1 Microphones: characteristics of microphones; types of microphones: Carbon Microphone, Crystal Microphone, Moving Coil (Dynamic) Microphone, Capacitor Microphone, Tie Clip Microphone, Wireless/cordless Microphone, Working principle & construction, Bluetooth enabled microphone	2	
	1.2 Loudspeaker: Ideal Loudspeaker, Basic Loudspeaker, types of loudspeakers: crystal, electrostatic, permanent magnet; Woofers; tweeters; hi-fi system; multi-speaker system, working principle & construction, Bluetooth enabled speaker	2	
	1.3 PA system: introduction, Basic building blocks: microphone, speaker, and amplifier. PA system characteristics, speaker matching, wi-fi enable PA system.	1	
	1.4 Quiz conduction, Doubt Class	1	
	1.5 Unit Test	1	
Unit 2 Television System	2.1 Evolution of TV System, Definitions: Scanning, picture element, Aspect ratio, Persistence of vision & flicker, Resolution, Video bandwidth, Interlaced scanning, attributes of color, luminance, and chrominance, Camera & TV receiver, Television standard used in India.	4	
	2.2 Basic concept on Plasma Display, LCD display, LED display.	2	
	2.3 Basic concept of IPTV, Mobile TV, Smart TV.	1	
	2.4 Video interface: Composite, Separate Video, Digital Video Interface, SDI, HDMI.	1	
	2.5 Direct to Home System (DTH): Introduction & Block Diagram. Concept of set top box, indoor and outdoor units.	1	
	2.6 Quiz conduction, Doubt Class	1	
	2.7 Unit Test	1	
Unit 3.0 Home Appliances	3.1 Microwave oven: Block diagram and working principle, LCD Timer with Alarm, Single Chip Controller and other important technical specification.	3	
	3.2 Washing Machine: basic parts, Electronic Controller for Washing Machine and other technical specifications.	2	
	3.3 Air Conditioning & Refrigeration: Block diagram and working principle, functions, indoor and outdoor units and other important technical specifications	2	
	3.4 Quiz conduction, Doubt Class	1	
	3.5 Unit Test	1	
Unit 4.0 Office Appliances	4.1 Xerography: Xerographic Process, Extension to Dynamic Copier, working, technical specifications.	1	
	4.2 CCTV camera: Introduction, Applications for CCTV, Multi Camera System With Video Recorder (Block Diagram Only)	2	
	4.3 Biometric Attendance System Block diagram, working, technical specification, types.	2	

	4.4 Quiz conduction, Doubt Class	1	
	4.5 Unit Test	1	
Unit 5.0 Electronics for Automobiles	5.1 In-Car computers: applications, Electronic ignition, electronic ignition and door lock system, Anti-Lock Braking System, Dashboard functions and circuitry, other digital displays, vehicle proximity Detection System ,Car navigation System, charging function and battery-operated vehicle .	3	
	5.2 Automobile Battery Hybrid Synergy Vehicles Electronic Power Steering and braking system, Parking Assistant System, Immobilizer system, electronic fault indication mechanism/system, RFID based maintenance and repair assistant, fast tage service for toll collection, car communication system/GPS based communication system.	3	
	5.3 Quiz conduction, Doubt Class	1	
	5.4 Unit Test	1	
Total Class Required		42	

Report