

Repair and Maintenance of PA and Audio System

NAME	: Repair and Maintenance of PA and Audio System
SECTOR	: Electronics.
CODE	: ELC210
DURATION	: 120 Hrs
Entry qualification:	8th std pass with age at least 14 years. <i>MES Modules on Basic Electronics -Repair and Maintenance of Power supply, Inverter and UPS</i>
TERMINAL COMPETENCY	: After completion, the participant would be able to Maintain and repair of public address systems and Audio systems

CONTENTS:

Practical Competencies	Underpinning Knowledge (Theory)
<i>Practice procedures for safety and health hazards measures</i>	<i>Electrical and personal safety, dangers and preventions</i>
Identify the various types and power rating of speakers	Understand the working of microphones and speakers
Types of microphones and their applications	Types of microphones and their properties.
Construct and repair small power supplies	Power supply , ripple, filtering and power rating. Regulated power supply
Amplifier -connection with microphone and speakers	Importance of Impedance matching, types of wires used for connecting mic and speakers.
Long line connection, line transformers and their connection, phasing according to manufacturing	Pre amplifiers, their necessity, impedance matching, wire less microphones
Fault finding in pre amplifier sections	Power amplifiers, components used in power amplifier section and their functions
Fault finding in power amplifier sections, power transistor testing	Earthing and its importance
Rectification of Humming and whistling problems	Multi input amplifiers and their connctions.
CD Player Identify the internal parts of CD player such as Loading motor and its assembly Turntable motor and its assembly Slider motor and tracking coil Linear tracking pickup assembly Servo system and OPU Lens cleaning	Study the working principle of ACD and VCD players Study the functions of front panel controls Study the parts in mechanical section and their working Explain the loading action of CD player
Trouble shooting with the following faults. Dead set, Tray does not open., Disc not reading, Track jumps, CD gets ejected	Study the motors used and the working of servo system Study the optical pickup unit and its working

RESOURCES:

- PA system
- Mic – assorted types
- Speakers – assorted types and wattages
- CD/VCD players
- DVD players
- Wireless microphone (VHF)