SEMESTER-1

BASIC-3

SOUND BASICS
(PROUCTION, REPRODUCTION & BROADCAST)

Credits: 3

L	T	P
2	1	0

SOUND PRODUCTION

1. **What is sound?**

   Role of sound is in our life - Sources of Sound - Natural and Man-made sound - Mechanism of sound production - Musical sound - How do we hear sound?

2. **The science of sound**

   Nature of sound - Types of sound - Characteristics of Sound: Wavelength, Amplitude, Time-Period, Frequency and Velocity or Speed - Elements of Sound: Pitch, Duration, Dynamics, Tempo, Timbre, Texture and Structure

SOUND REPRODUCTION

3. **Audio Technology**

   Reproduction of Good Sound: Fidelity-Intelligibility-Loudness; Simple PA system to today's events; Components of PA system: microphones, stands, cables, amplifiers, mixers, loudspeakers, monitors and related equipment; Choosing right PA system; Audio Technology: It's past, present and future

SOUND BROADCAST

4. **Radio Broadcasting**

   Introduction to Radio as a medium of communication - Historical development of radio broadcasting - Radio broadcasting and reception Technology; AM, FM, Analogue and digital transmission, Satellite, DTH, Internet & Mobile technology

5. **Radio Program Production**

   Program formats: Talk, news, interview, music, drama, feature, documentary, docudrama, phone-in, discussion and games etc.

   Radio studio and Production: Studio set-up, Studio Acoustics, Editing programs - Radio as a new art form: Radio acting, Sound effects, Radio music

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Reference Books:

1. Live Sound basics: Rick Wallace
2. PA System Guide: by Tejas Mallela
3. Digital Video and Audio Broadcasting Technology
4. Introduction to Radio production: by Oberiri Destiny Apuke

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SOUND REPRODUCTION PRACTICE

Credits: 2

L	T	P
0	0	4

1. ## Basic Sound Equipment
   - Function of Microphone, Amplifiers, Loud Speakers
   - Connecting Cables, XLR 3-Pin Connectors
   - Chain for reproduction of sound

2. ## Auxiliary Input to any speaker system
   - Function: To allow input sound from any media device
   - Types of Aux Inputs: RCA or 3.5 Aux IN
   - Joining the media player to the Aux-Input Port with 3.5 Aux audio cable

3. ## Basic Terminology & their function
   - Amplifiers, Channel, Delay, Equalizer, Fader, Jack, Level,
   - Line-in (Input / Return), Line-out (Output / send)
   - Master volume, Mixer, Monitors, Pan, Phantom Power
   - Return, PhonoPlug / Jack, XLR Connector

4. ## Operating PA System
   - Function of different Blocks: Microphone, Mixtures, Voltage Amplifier and Processing Circuits, Driver and Power amplifiers