

**PSG COLLEGE OF ARTS & SCIENCE**  
**(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2025**  
(Third Semester)

**Branch – VISUAL COMMUNICATION (ELECTRONIC MEDIA)**

## AUDIO PRODUCTION TECHNIQUES

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

**Answer ALL questions**

**ALL questions carry EQUAL marks**

$$(10 \times 1 = 10)$$

Module No.	Question No.	Question	K Level	CO
1	1	Which microphone polar pattern captures sound equally from all directions? a) Cardioid                      b) Supercardioid c) Omnidirectional          d) Figure-8	K2	CO4
	2	What does the term "headroom" refer to in audio production? a) The amount of extra space above the peak level before clipping occurs b) The balance between left and right audio channels c) The amount of gain applied to an audio signal d) The total dynamic range of an audio track	K2	CO2
2	3	What is the difference between mono and stereo audio? a) Mono uses one channel, while stereo uses two b) Stereo is for low frequencies, while mono is for high frequencies c) Mono signals are uncompressed, while stereo signals are compressed d) Stereo uses multiple microphones, while mono uses one	K3	CO3
	4	What is the purpose of a noise gate? a) To increase the overall volume of a signal b) To automatically remove background noise below a certain threshold c) To boost high-frequency sounds d) To apply effects to an audio track	K2	CO2
3	5	Which bit depth is commonly used for professional audio recording? a) 8-bit                      b) 16-bit                      c) 24-bit                      d) 32-bit	K3	CO3
	6	What is a DAW (Digital Audio Workstation)? a) A hardware device used for recording audio b) A software application for recording, editing, and producing audio files c) A microphone used for digital recording d) An audio interface for connecting instruments to a computer	K2	CO1
4	7	Which of the following effects is used to create a sense of space and depth in audio? a) Reverb    b) Compression    c) Limiter    d) Equalizer	K2	CO3
	8	What does a "crossfade" do in audio editing? a) Smoothly transitions between two audio clips b) Adds reverb to an audio track c) Adjusts the volume of one track while boosting another d) Changes the tempo of a track	K2	CO4
5	9	What is "latency" in audio production? a) The amount of time it takes for an audio signal to be processed and heard b) The difference between high and low frequencies c) The time delay applied to an audio track d) The speed at which audio signals travel	K2	CO5

Cont...

	10	Which of the following describes a "bus" in audio mixing? a) A separate track used for vocals only b) A single audio channel that combines multiple tracks c) A plugin used for adding reverb d) A control that increases the bass in an audio signal	K2	CO5
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**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Describe the role of phantom power in audio production, and which types of microphones require it?	K2	CO1
	(OR)			
	11.b.	Elucidate the role of noise gates in recording, and how do they improve signal clarity?		
2	12.a.	Describe the role of a pop filter in a recording setup, and how it improves vocal recordings.	K3	CO2
	(OR)			
	12.b.	Distinguish the differences between dynamic, condenser, and ribbon microphones.		
3	13.a.	Describe the differences between TRS (Tip-Ring-Sleeve) and TS (Tip-Sleeve) connectors and their respective uses in audio connections.	K3	CO3
	(OR)			
	13.b.	Define the difference between low-frequency sounds (bass) and high-frequency sounds (treble) in audio production.		
4	14.a.	Describe the typical workflow of an ADR session, from recording to editing.	K3	CO4
	(OR)			
	14.b.	Explain the process of creating sound effects for cartoons. How does it differ from sound effects used in live-action films?		
5	15.a.	Explicate the key stages involved in producing a radio program.	K5	CO5
	(OR)			
	15.b.	Brief on the advantages of using AI-driven virtual instruments and synthesizers in music production		

**SECTION -C (30 Marks)**

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain the signal chain in an audio production environment. Why is signal flow important in achieving a clean sound?	K3	CO1
2	17	How do audio formats like WAV, MP3, and FLAC differ in terms of quality and usage?	K3	CO2
3	18	Illustrate MIDI, and how does it differ from traditional audio recording?	K3	CO3
4	19	Brief on the advantages and challenges of mixing for binaural audio or 3D sound environments?	K3	CO4
5	20	Detail the key components of a radio production setup, including equipment and software used for live broadcasting?	K5	CO5