# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

#### **BSc DEGREE EXAMINATION MAY 2025**

(Second Semester)

## Branch- VISUAL COMMUNICATION (ELECTRONIC MEDIA)

### **MULTIMEDIA & GRAPHICS**

Time: Three Hours

Maximum: 75 Marks

### SECTION-A (10 Marks)

Answer ALL questions

**ALL** questions carry **EQUAL** marks  $(10 \times 1 = 10)$ 

ALL questions carry EQUAL marks $(10 \times 1 = 10)$							
Module No.	Question No.	Question	K Level	СО			
1	1	Which of the following is NOT a raster image format?  a) BMP b) TIFF c) GIF d) EPS	K1	CO1			
	2	What does "aspect ratio" refer to in video production?  a) The length of the video b) The width and height of the video c) The quality of the video d) The frame rate	K2	CO2			
2	3	Which type of animation uses stop motion techniques? a) 2D animation b) 3D animation c) Claymation d) Motion graphics	K1	CO1			
	4	Which tool is commonly used for creating animations?  a) Microsoft Excel b) Adobe Animate c) Adobe InDesign d) CorelDRAW	K2	CO2			
3	5	What is the primary function of a codec?  a) To compress and decompress digital media b) To edit audio files c) To create animations d) To manage file storage	KI	CO1			
	6	What does "bitrate" refer to in audio and video files?  a) The color depth of an image  b) The number of bits processed per unit of time  c) The resolution of an image  d) The file size	K2	CO2			
4	7	What is the purpose of a digital asset management system?  a) To edit video files b) To organize and store multimedia content c) To create animations d) To enhance sound quality	K1	CO1			
	8	What file format is typically used for lossless audio compression?  a) MP3 b) WAV c) AAC d) OGG	K2	CO2			
5	9	What is the term for a 3D object that has been created with a polygonal mesh?  a) NURBS b) Shader c) Model d) Rig	K1	CO1			
	10	In 3D animation, what is a "render farm"?  a) A type of 3D model  b) A group of computers working together to render animations c) A lighting setup for 3D scenes d) A technique for motion capture	K2	CO2			

Cont...

## SECTION - B (35 Marks)

Answer ALL questions

Module Question ALL questions carry EQUAL Marks (5 × 7 = 35)							
No.	No.	Question	K Level	СО			
1	11.a.	Explain the key components of a multimedia system.					
	(OR)			001			
	11.b.	Explain the difference between hypermedia and multimedia. Provide examples of each.	K1	CO1			
2	12.a.	Define dithering in computer graphics? How does it help in reducing color banding?					
		(OR)		CO2			
	12.b.	Describe the concept of transparency in digital images. How is alpha blending used to create transparency effects?		;			
3	13.a.	Explicate the role of a video timeline in editing software? How does it help in the process of video editing?					
	(OR)			CO3			
	13.b.	Discuss the differences between mono and stereo sound. In what situations would each be preferable?	K3				
4	14.a.	Explain the basic principles of squash and stretch in animation.					
	(OR)			CO4			
	14.b.	Examine the concept of keyframing in animation. How does it help in automating the animation process?	K4	CO4			
5	15.a.	Discuss on rigging in 3D animation? Why is it essential for animating characters?					
	(OR)			CO5			
	15.b.	Elucidate the advantages and challenges of using motion					

# SECTION -C (30 Marks) Answer ANY THREE questions

capture technology in animation.

ALL questions carry EQUAL Marks  $(3 \times 10 = 30)$ Module Question  $\mathbf{K}$ Question CO No. No. Level Discuss the different types of multimedia authoring tools 1 16 CO1 K1 and their applications. What is the aspect ratio in video? How do common aspect 2 17 K2 CO2 ratios like 16:9 and 4:3 affect video playback? Explicate the working principle of MIDI (Musical 18 3 **K3** CO3 Instrument Digital Interface) in multimedia. Detail on the purpose of video editing software? Give 4 19 K4 CO<sub>4</sub> examples of tools commonly used in video production. Elaborate the difference between forward and inverse 5 20 kinematics in animation. Provide examples of when each CO<sub>5</sub> **K6** technique is appropriate.