PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2023
(Second Semester)

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

MULTIMEDIA & GRAPHICS

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1. What does the term "kerning" refer to in graphic design?
   (i) Adding a drop shadow to text   (ii) Converting text to a vector graphic
   (iii) Applying a texture to text   (iv) Adjusting space between letters in a font.

2. In color theory, what is the complementary color of blue?
   (i) Green   (ii) Yellow
   (iii) Red   (iv) Orange

3. What is the primary advantage of using a motion capture (mocap) system in 3D animation production?
   (i) It allows for easy texture mapping.
   (ii) It simplifies the process of rigging characters.
   (iii) It captures realistic character movements from live actors.
   (iv) It automatically generates 3D models.

4. What is the purpose of "keyframing" in video editing?
   (i) Adding background music to a video
   (ii) Creating smooth transitions between video clips
   (iii) Adjusting the color balance of a video
   (iv) Animating changes in properties like position, scale over time in a video

5. Which file format is commonly used for lossless compression of images with support for transparency?
   (i) JPEG   (ii) PNG
   (iii) GIF   (iv) TIFF

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6. a   Analyze the significance of color theory in graphic design?
              OR
   b   Describe the concept of vector graphics versus raster graphics.

7. a   How does multimedia contribute to e-learning and online education?
              OR
   b   Explain the role of compression in multimedia. Why is compression used?

8. a   Describe the primary goal of the pre-production phase in video editing?
              OR
   b   Explain the difference between linear video editing and non-linear video editing. Which approach is more commonly used today and why?

9   a   Explain the traditional frame-by-frame animation technique used in 2D animation. How is it different from tweening?

OR

    b   State the principles of squash and stretch, anticipation, and follow-through in 2D animation.

10   a   Describe the role of textures and shaders in 3D animation. How do they enhance the visual quality of 3D models and scenes?

OR

    b   Narrate the concept of rigging in 3D animation. Why is rigging essential for character animation?

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks   (5 x 6 = 30)

11   a   Discuss the importance of using typography in design.

OR

    b   Explicate the different image file formats with its features.

12   a   Discuss the ethical considerations in multimedia and graphic design, including copyright, fair use, and responsible design practices.

OR

    b   Elucidate the different types of compression format in audio with detail.

13   a   Examine the importance of pacing and rhythm in video editing. How can editing choices influence the emotional impact of a video?

OR

    b   Differentiate the "J-cut" and "L-cut" in video editing, and how do these techniques contribute to smoother and more engaging edits?

14   a   Classify the principles of timing and spacing in 2D animation. How do these principles influence the perception of motion and character personality? Provide examples of how timing and spacing are used effectively in classic 2D animations.

OR

    b   Enumerate the steps involved in the process of Motion tween, Shape tween and Motion guide.

15   a   Examine the entire process of creating a 3D animation from concept to final output. Include the stages of pre-production, modeling, rigging, keyframing, rendering, and post-production.

OR

    b   Compare the process of animation techniques, between a bouncing rubber ball and an iron ball.

Z-Z-Z   END