

C-4629

Sub. Code

82913

B.Sc. DEGREE EXAMINATION, APRIL 2025

First Semester

Visual Effects

DESIGN AND PHOTOGRAPHY

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. _____ is a principle of design that deals with the arrangement of elements to create a sense of equilibrium in a design.
(a) Emphasis (b) Dominance
(c) Harmony (d) Rhythm
2. Creativity is important in design because _____.
(a) It adds unnecessary complexity
(b) It leads to confusion
(c) It allows for innovative solutions and unique designs
(d) It restricts options

3. _____ focuses on capturing small details of subjects.
- (a) Portrait photography
 - (b) Landscape photography
 - (c) Wildlife photography
 - (d) Macro photography
4. _____ is a fundamental function of a camera's aperture.
- (a) Controlling light sensitivity
 - (b) Adjusting focus
 - (c) Changing lens types
 - (d) Regulating the amount of light entering the camera
5. The additive color model primarily used for _____.
- (a) Mixing paints
 - (b) Mixing light sources
 - (c) Printing documents
 - (d) Displaying digital images
6. Color contrast impact a design as _____.
- (a) It makes the design monotonous
 - (b) It creates visual interest and emphasis
 - (c) It reduces the visibility of elements
 - (d) It limits color options

7. _____ is the process of cropping and scaling used for in graphics.
- (a) Adjusting colors
 - (b) Resizing images
 - (c) Adding text
 - (d) Arranging elements
8. Selecting appropriate fonts in design is important because _____.
- (a) It has no impact on readability
 - (b) It enhances the visual appeal and readability of content
 - (c) It limits creativity
 - (d) It reduces font options
9. _____ are factors that influence a layout.
- (a) Grids and templates only
 - (b) Organization and structure
 - (c) Content and audience
 - (d) Color theory
10. _____ is a stage of the design process.
- (a) Structure and layout
 - (b) Creativity and innovation
 - (c) Approach and guidelines
 - (d) Demonstration and development

Part B

(5 × 5 = 25)

Answer **all** the questions choosing either (a) or (b).

11. (a) Discuss the importance of visual composition in design with examples.

Or

- (b) Explain how creativity plays a vital role in design.
12. (a) How can repetition enhance the visual impact of a design?

Or

- (b) Discuss how designers can foster and develop their creativity to produce innovative designs.
13. (a) Explain the psychological effects of warm and cool colors in design.

Or

- (b) How does color contrast enhance visual hierarchy and readability in graphic and web design?
14. (a) Explain the role of spacing and alignment in typography and its impact on readability.

Or

- (b) Describe the process of image manipulation techniques.

15. (a) Explain the concept of design thinking and its application in problem-solving within the design process.

Or

- (b) Compare and contrast different layout templates and their suitability for various design projects.

Part C

(5 × 8 = 40)

Answer **all** questions choosing either (a) or (b).

16. (a) Brief on visual composition, and how does it contribute to improving a design.

Or

- (b) How do balance, emphasis, and harmony differ and relate to each other in design principles?

17. (a) Compare the various types of lenses used in photography and their respective applications.

Or

- (b) Explain the basics of light and its significance in photography.

18. (a) Explore the psychological effects of colors and discuss the effective use of color contrast.

Or

- (b) Analyze the differences between warm and cool colors regarding their visual impact.

19. (a) Explain the significance of spacing and alignment in typography and how they affect readability.

Or

- (b) Detail the steps involved in image manipulation for graphic design.
20. (a) Explain the important parts of a page layout and their significance in creating visually appealing designs.

Or

- (b) Contrast various layout templates and their suitability for different design projects.
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C-4630

Sub. Code

82923

B.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Visual Effects

MOTION GRAPHICS

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. _____ is the term for the visual style that combines flat design with subtle shadows and depth.
(a) Isometric design (b) Material design
(c) Neumorphism (d) Grunge design
2. _____ is often credited with the creation of the first motion graphic.
(a) Saul Bass (b) Walt Disney
(c) John Whitney (d) Charles-Émile Reynaud
3. _____ file formats can be imported into After Effects for creating animations.
(a) JPG and PNG (b) PSD and AI
(c) MP3 and WAV (d) DOC and PDF
4. _____ feature is essential for creating realistic facial expressions in character animation.
(a) Motion blur (b) Puppet pins
(c) Color grading (d) Shape morphing

5. _____ tool is typically used for 2D tracking in visual effects software.
- (a) Camera tracker (b) Point tracker
 - (c) Particle tracker (d) Roto brush
6. Rotoscoping is particularly useful for _____
- (a) Removing motion blur
 - (b) Isolating and manipulating specific parts of an image
 - (c) Tracking a camera
 - (d) Adjusting the color of an entire scene
7. _____ in After Effects simulates a directional light source, similar to sunlight.
- (a) Point Light (b) Ambient Light
 - (c) Spot Light (d) Parallel Light
8. The plugin widely used for creating realistic particle systems in After Effects is _____
- (a) Optical Flare
 - (b) Saber
 - (c) Trapcode Particular
 - (d) Displacement Map
9. _____ technique is commonly used to animate 3D text in Element 3D
- (a) Keyframe animation
 - (b) Path animation
 - (c) Motion graphics templates
 - (d) Particle effects
10. _____ adjusts the look of particles in a particle system.
- (a) Particle Size (b) Particle Texture
 - (c) Particle Speed (d) Particle Color

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b) from each.

11. (a) Write a brief note on kinetic typography and its application in motion graphics.

Or

- (b) Give an account on the principle of staging in animation with an example.
12. (a) Mention the process of importing an AI file into After Effects to be used in animation.

Or

- (b) Brief on fake 3D animation and its typical applications.
13. (a) Mention the objectives of color correction in post-production.

Or

- (b) Describe the key steps involved in setting up a 2D tracking workflow in After Effects.
14. (a) How does 3D layers in After Effects differ from 2D layers in terms of functionality and application.

Or

- (b) Discuss on how displacement maps are used to create distortions in motion graphics.
15. (a) Explain the different types of lights available in Element 3D.

Or

- (b) Describe the role of groups in organizing managing complex 3D scenes.

Part C

(5 × 8 = 40)

Answer **all** questions choosing either (a) or (b) from each.

16. (a) Evaluate the importance and types of video file formats in motion graphics production.

Or

- (b) Analyze the strengths and limitations of different types of motion graphics.

17. (a) Analyze the challenges associated with synchronizing character facial animations with dialogue or voiceovers in After Effects.

Or

- (b) Discuss the principles of isometric design and the process of creating isometric icon animations.

18. (a) Explain the challenges and techniques involved in using the paint tool for digital matte painting.

Or

- (b) Evaluate the importance of compositing in the visual effects pipeline in detail.

19. (a) Discuss the creative possibilities offered by Trapcode Particular in motion graphics.

Or

- (b) Analyze the challenges and techniques involved in audio editing for motion graphics.

20. (a) Explain how materials and textures are applied to 3D objects and text in Element 3D.

Or

- (b) Describe the process of setting up and using particle system to create a specific visual effect in element 3D.

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Sub. Code

82925

B.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Visual Effects

VISUALIZATION FOR PRODUCTION

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. _____ depth cue is associated with the overlapping of objects.
 - (a) Linear perspective
 - (b) Atmospheric perspective
 - (c) Occlusion
 - (d) Scale
2. _____ is directly connected to the object casting it.
 - (a) Cast shadow
 - (b) Reflected shadow
 - (c) Core shadow
 - (d) Form shadow

3. In figure drawing _____ is often used as a unit of measurement.
- (a) 5 heads
 - (b) 6 heads
 - (c) 7 heads
 - (d) 8 heads
4. _____ wing a figure by focusing on its outermost edges.
- (a) Gesture drawing
 - (b) Contour drawing
 - (c) Cross-hatching
 - (d) Shading
5. An archplot is _____.
- (a) A story with a conventional structure and a clear beginning, middle, and end
 - (b) A story with a non-linear structure and ambiguous events
 - (c) A story focused on internal character struggles rather than external events
 - (d) A story with multiple protagonists and parallel storylines
6. _____ is the “call to adventure” in the hero’s journey.
- (a) The hero’s refusal to embark on the journey
 - (b) The moment the hero first encounters the antagonist
 - (c) The event that sets the hero on their journey
 - (d) The final battle

7. A thumbnail sketch in a storyboard represent _____.
(a) A detailed close-up of the character
(b) A small, rough drawing representing a shot
(c) A final, colored version of the scene
(d) The complete script
8. _____ is NOT a characteristic of a final animatic.
(a) Refined timing and pacing
(b) Full-color and detailed visuals
(c) Synchronized audio and visuals
(d) Rough visuals with basic audio
9. The standard resolution for web images in Photoshop is _____.
(a) 150 PPI
(b) 300 PPI
(c) 600 PPI
(d) 72 PPI
10. The shortcut key to decrease the brush size in Photoshop is _____.
(a) [
(b)]
(c) Ctrl + [
(d) Ctrl +]

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the role of light and shade in creating the illusion of depth in a drawing.

Or

- (b) Differentiate between the aerial and linear perspective.
12. (a) Analyze the significance of the line of action in figure drawing.

Or

- (b) Mention the measuring techniques used to ensure accuracy in the proportions of the human figure.
13. (a) List down the advantages and limitations of using a linear structure in storytelling.

Or

- (b) Write a brief note on the concept of internal versus external conflict in a story.
14. (a) Brief on the key elements to be included in a storyboard to effectively convey scene's action and emotion.

Or

- (b) Mention the benefits of integrating detailed annotations for camera and character movements in a storyboard.

15. (a) Explain the process of creating thumbnails in Photoshop.

Or

- (b) Discuss the role of color correction tools in Photoshop.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the various types of depth cues used to create the illusion of three dimensionality on a two-dimensional surface.

Or

- (b) Compare and contrast geometrical and non-geometrical forms in visual art with their applications.

17. (a) Write in detail about the technique of foreshortening in figure drawing with the step by step process.

Or

- (b) Analyze the complexities of drawing hands and feet in figure drawing.

18. (a) Identify and analyze three common situation archetypes in storytelling.

Or

- (b) Explain the three-act structure in detail.

19. (a) Describe the process of integrating SFX into an animatic contributing its realism.

Or

- (b) Create a storyboard for a 3-minute animated short film based on the following premise: A young robot discovers nature for the first time. Include at least 10 panels with corresponding thumbnail sketches. (Illustrations).
20. (a) Discuss the importance and process of photo manipulation in digital art and design.

Or

- (b) Explain the process of creating and working with 3D objects in Photoshop.
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C-4632

Sub. Code

82933

B.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Visual Effects

VFX PRODUCTION – I (COMPOSITING)

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. _____ among the following is one of the key advantages of using node-based compositing in Nuke.
 - (a) Easier to learn than layer-based compositing
 - (b) Offers a non-destructive workflow with more flexibility
 - (c) Requires less processing power
 - (d) Automatically creates final renders without user input

2. _____ of the following components in Nuke's interface is primarily used for visualizing and navigating the compositing workspace.
 - (a) Properties Bin (b) Viewer
 - (c) Node Graph (d) Menu Tab

3. The main advantage of segmenting a character in rotoscoping is _____.
- (a) Simplifies Background Removal
 - (b) Enhances Color Saturation
 - (c) Increases Render Speed
 - (d) Reduces File Size
4. _____ feature is used to soften the edges of a rotoscoped character in Nuke.
- (a) Blur
 - (b) Feather
 - (c) Merge
 - (d) Transform
5. The main purpose of using a planar tracker in compositing _____.
- (a) Track Moving Objects
 - (b) Track Rigid Objects
 - (c) Track Static Surfaces
 - (d) Track Cameras
6. _____ is a key benefit of 3D camera tracking in visual effects.
- (a) Simplifies Color Correction
 - (b) Allows Integration of 3D Elements into Live-Action Footage
 - (c) Speeds Up Render Times
 - (d) Improves Audio Quality

7. The function of the Grade node in color correction is
- (a) Adjusts the Brightness and Contrast
 - (b) Creates a Color Matte
 - (c) Tracks Camera Movement
 - (d) Removes Green Screen Artifacts
8. The process of converting from Log to Linear color space accomplish _____.
- (a) Enhances Color Saturation
 - (b) Improves Color Accuracy for Display
 - (c) Simplifies Keying
 - (d) Reduces Image Noise
9. The function of the Scanline Render node in Nuke is _____.
- (a) To Apply Textures
 - (b) To Render 3D Scenes to 2D
 - (c) To Track Objects
 - (d) To Key Out Backgrounds
10. How do you import 3D objects into Nuke for compositing?
- (a) Using the Camera Node
 - (b) Using the 3D Import Node
 - (c) Using the Scanline Render Node
 - (d) Using the 3D Model Node

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the process of merging multiple images or layers in Nuke with the suitable diagrams.

Or

- (b) Explain compositing and the role of the Node Graph in Nuke software.

12. (a) How is the Feather tool used in rotoscoping, and what effect does it have on the edges of a roto shape?

Or

- (b) Discuss the technique and advantages of using open splines for hair rotoscoping.

13. (a) Explain the benefits of four-point tracking in compositing.

Or

- (b) Discuss the role and benefits of planar tracking in tracking static surfaces or objects.

14. (a) What are the differences between Keylight and IBK Color in keying and when might you use each?

Or

- (b) Discuss the purpose and function of the Hue Correct and Hue Shift tools in color correction.

15. (a) Explain the steps involved in setting up 3D lighting in Nuke software.

Or

- (b) Discuss the process of applying textures in Nuke with diagram.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Describe in detail the interface of Nuke software with diagrams.

Or

- (b) Discuss the different blending modes in Nuke software and how they effect in the compositing software.
17. (a) Explain the steps involved in rotoscoping the character with diagrams of your choice.

Or

- (b) Describe the process with diagrams of using open splines for hair rotoscoping.
18. (a) Describe the concept and advantages of 3D camera tracking with its application in visual effects.

Or

- (b) Discuss the differences between tracking rigid objects and using planar tracking techniques.
19. (a) Discuss the conversion Log to Linear color space in the compositing pipeline and its impact on color accuracy.

Or

- (b) Discuss the steps involved in creating matte paintings for compositing.

20. (a) Explain the concept and process of camera projection in Nuke.

Or

- (b) Discuss the steps and considerations involved in converting 3D renders to 2D using the Scanline Render node.
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C-4633

Sub. Code

82935

B.Sc. DEGREE EXAMINATION, APRIL 2025.

Third Semester

Visual Effects

**FUNDAMENTALS OF VIDEOGRAPHY AND
AUDIOGRAPHY**

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. The consequence of setting a high ISO in low-light conditions leads to
 - (a) Increased sharpness
 - (b) Increased noise or grain in the image
 - (c) Decreased exposure
 - (d) Reduced color saturation

2. _____ would you choose to minimize distortion in architectural photography.
 - (a) Fisheye lens (b) Wide-angle lens
 - (c) Tilt-shift lens (d) Telephoto lens

3. _____ framing technique can help isolate the subject from the background.
- (a) Employing a shallow depth of field
 - (b) Using leading lines
 - (c) Adding a vignette
 - (d) Cropping the image
4. HDR stand for in photography and videography
- (a) High Definition Resolution
 - (b) High Dynamic Range
 - (c) High Data Rate
 - (d) High Digital Resolution
5. _____ of a sound as the frequency increases.
- (a) The pitch decreases
 - (b) The pitch increases
 - (c) The pitch remains the same
 - (d) The pitch becomes distorted
6. _____ component of a microphone is responsible for converting sound waves into electrical signals.
- (a) Diaphragm
 - (b) Amplifier
 - (c) Speaker
 - (d) Equalizer

7. _____ is commonly used in mixing to create a sense of space and depth in the audio.
- (a) Equalization (b) Compression
(c) Reverb (d) Limiting
8. The primary characteristic of a cardioid microphone is that it _____.
- (a) Captures sound equally from all directions
(b) Captures sound mainly from the front
(c) Captures sound from the rear
(d) Captures sound from the sides
9. The primary purpose of Foley in film production is _____.
- (a) To create background music
(b) To replace dialogue
(c) To add realistic sound effects
(d) To enhance visual effects
10. Ambience in sound design refers to _____.
- (a) The main theme of the film's soundtrack
(b) The background sounds that create a sense of environment
(c) The dialogue between characters
(d) The echo effect used on sound effects

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Analyse the impact of the transition from analog to digital videography on the film industry.

Or

- (b) Compare and contrast cinematic videography and documentary videography, focusing on their objectives and techniques.
12. (a) Explain the rule of thirds and how it can enhance the composition of a photograph.

Or

- (b) “Composition serves as a storytelling tool in visual media” – Analyse.
13. (a) Give a note on the role of Thomas Edison in the history of audiography.

Or

- (b) Write a note on resonance and its relevance in sound production.
14. (a) Differentiate between dynamic and condenser microphones.

Or

- (b) Brief on the benefits of utilizing noise reduction tools in the audio editing process.

15. (a) Mention the importance and impact of timing and synchronization in Foley recording.

Or

- (b) Describe the process of designing soundscapes for different genres.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the key components of a camera and their functions in detail.

Or

- (b) Elucidate how exposure compensation works in cameras mentioning the exposure triangle components.

17. (a) Discuss the importance and contribution of shadow and contrast in shaping the mood of a scene.

Or

- (b) Explain three-point lighting setup and analyze the role of key lighting in it.

18. (a) Evaluate the impact of digital audio workstations on modern audio production.

Or

- (b) Describe the human auditory system, focusing on how the ear converts sound waves into signals that the brain can interpret.

19. (a) Analyze the common issues that arise during location sound recording and mention the strategies and tools available to address them effectively.

Or

- (b) Discuss the importance of dynamic range compression in audio editing.
20. (a) Evaluate the pros and cons of various audio file formats.

Or

- (b) Explain the role of loudness normalization in the quality control process.
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C-4634

Sub. Code

82936

B.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Visual Effects

VFX PRODUCTION – II (3D FOR VFX)

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. _____ is the process of breaking down a smooth surface into smaller polygons in computer graphics.
 - (a) Texturing
 - (b) Rigging
 - (c) Tessellation
 - (d) Shading
2. The purpose of the “Bridge” tool in Maya is _____.
 - (a) To Connect Edges between Two Meshes
 - (b) To Create Polygon Primitives
 - (c) To Apply Textures
 - (d) To Split a Mesh
3. _____ UV mapping projection type is best suited for wrapping a texture around a cylindrical object.
 - (a) Planar
 - (b) Spherical
 - (c) Cylindrical
 - (d) Automatic

4. The primary use of the UV Editor tools like in Maya is _____.
- (a) To Adjust Material Properties
 - (b) To Edit and Arrange UV Maps
 - (c) To Create 3D Models
 - (d) To Apply Lighting Effects
5. The main advantage of using HDRI lighting in 3D rendering is _____.
- (a) Simplifies Color Grading
 - (b) Provides Realistic Lighting and Reflections
 - (c) Enhances Texture Detail
 - (d) Improves Model Geometry
6. The Maya feature that allows for advanced lighting setups, including indirect lighting and global illumination is _____.
- (a) Rasterize Shadows
 - (b) Arnold Lighting
 - (c) Depth Map Shadows
 - (d) Cluster Lighting
7. What does the “Paint Skin Weights” tool allow you to do in Maya?
- (a) Adjust Bone Joints
 - (b) Modify Mesh Topology
 - (c) Control the Influence of Joints on the Mesh
 - (d) Create Animation Keyframes

8. Which nonlinear deformer would you use to create a stretching effect on a mesh?
- (a) Bend (b) Twist
(c) Squash (d) Wave
9. What does Ambient Occlusion help to simulate in a rendered image?
- (a) Surface Reflection
(b) Shadow Softness
(c) Light Interactions in Occluded Areas
(d) Texture Details
10. Which render pass would you use to isolate and composite the diffuse lighting component of a scene?
- (a) Ambient Occlusion
(b) Specular Pass
(c) Diffuse Pass
(d) AOV Pass

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b)

11. (a) Explain the process to convert NURBS surfaces to polygons.

Or

- (b) Discuss the role and functions of Mesh tools in Maya.

12. (a) Discuss the function and applications of UV Editor.

Or

- (b) Explain the various types of maps and their effects on a 3D model's surface.

13. (a) Discuss the role of depth map shadows and their impact on indoor lighting setups.

Or

- (b) Mention the advantages of using a three-point lighting setup in studio lighting, and how does it enhance the visual quality of a render?

14. (a) Write a detailed note on nonlinear deformers. Provide examples of their use.

Or

- (b) Discuss the role of the Time Slider and Keyframe Animation in animating characters.

15. (a) What is Ambient Occlusion, and how does it enhance the realism of rendered images.

Or

- (b) Discuss the importance of creating and using AOVs and render passes in the compositing pipeline.

Part C

(5 × 8 = 40)

Answer **all** questions choosing either (a) or (b)

16. (a) Discuss the methods and considerations for converting between NURBS and polygons in Maya along with the workflow.

Or

- (b) Describe the functionality and usage of mesh tools in Maya for editing and refinement in 3D models.
17. (a) Describe the tools available in the UV Editor for editing UV maps in detail.

Or

- (b) Discuss the roles and differences between bump maps, normal maps, and displacement/height maps and how are these maps used to enhance the detail and realism of 3D textures?
18. (a) Describe the advanced lighting features available in Arnold for Maya and their features to improve the realism of a scene.

Or

- (b) Explain the process of creating a realistic lighting along with benefits of using HDRI and environment skydome lighting.

19. (a) Explain the process and advantages of using Interactive Bind Skin and Paint Skin Weights tools in character rigging and animation.

Or

- (b) Discuss the animation workflow along with process using the Time Slider and Keyframe Animation in Maya.
20. (a) Explain the role along with techniques to enhance the compositing process of creating Arbitrary Output Variables.

Or

- (b) Discuss the factors influencing the Adaptive Sampling improves rendering efficiency and quality in compositing in Maya.
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C-4635

Sub. Code

82943

B.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Visual Effects

VIDEO EDITING

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Which of the following is a common video file format?
(a) JPEG (b) PNG
(c) MP4 (d) GIF
2. Which codec is widely used for compressing and decompressing video files?
(a) H.264 (b) WAV
(c) MP3 (d) BMP
3. Which tool is commonly used for color correction in video editing software?
(a) Cut Tool (b) Keyframing
(c) Lumetri Color (d) Ripple Edit Tool

4. What is the primary benefit of multicam editing in video production?
- (a) Enhances audio quality
 - (b) Simplifies editing from multiple camera angles
 - (c) Increases video resolution
 - (d) Adds special effects
5. Which of the following is a best practice for project organization and file management in video editing?
- (a) Storing all files in the same folder
 - (b) Using descriptive file names and organized folder
 - (c) Saving files only on the desktop
 - (d) Avoiding the use of backups
6. Which audio effect is commonly used to reduce background noise in audio tracks?
- (a) Reverb
 - (b) Equalization (EQ)
 - (c) Noise reduction
 - (d) Delay
7. Which element is crucial for storytelling in documentary editing?
- (a) Special effects
 - (b) Real-life footage
 - (c) Animation
 - (d) Voice modulation

8. What is a key aspect of music video editing?
- (a) Color correction
 - (b) Synchronization with music
 - (c) Adding subtitles
 - (d) Using stock footage
9. What is the primary purpose of a demo reel for a video editor?
- (a) To showcase technical specifications
 - (b) To display the editor's best work and skills
 - (c) To provide a timeline of project completion
 - (d) To highlight the equipment used
10. Which career path involves working on various projects independently and securing clients on a project-by-project basis?
- (a) Full-time employment at a studio
 - (b) Freelancing
 - (c) Internship
 - (d) Volunteering

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the basic interface elements of a typical video editing software and their functions.

Or

- (b) Discuss the purpose and types of transitions used in video editing.

12. (a) Explain the process of keyframing and its importance in creating animations in video editing.

Or

- (b) Mention the benefits of using multicam editing in video production.

13. (a) Describe the best practices for organizing and managing project files in video editing.

Or

- (b) Discuss the importance of collaboration and teamwork in editing projects.

14. (a) Discuss the role of understanding client needs and branding in commercial and promotional video editing?

Or

- (b) What are the key elements to consider when editing vlogging content to maintain viewer engagement?

15. (a) Explain the key components that should be included in a professional demo reel for a video editor.

Or

- (b) Discuss the importance of networking and professional communication skills in advancing a career in video editing.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the importance of codecs in video editing and distribution.

Or

- (b) Evaluate the significance of cuts and transitions in video editing. With Examples.

17. (a) Discuss the role of advanced editing tools in professional video production.

Or

- (b) Discuss the significance of video effects in enhancing the storytelling and visual appeal of a video.

18. (a) Describe the process of creating text animations in video editing software. Provide examples of different types of text animations?

Or

- (b) Evaluate the role of collaboration and teamwork in video editing projects.

19. (a) Analyze the storytelling techniques used in documentary editing.

Or

- (b) Evaluate the importance of understanding client needs and branding in commercial and promotional video editing.

20. (a) Analyze the impact of emerging technologies on the video editing industry.

Or

- (b) Discuss the legal and ethical considerations involved in video editing, particularly in relation to copyright and fair use?
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C-4636

Sub. Code

82944

B.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Visual Effects

VFX PRODUCTION — III (FX FOR VFX)

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Houdini tool used for procedural modelling is
 - (a) VEX Programming
 - (b) VOP Network
 - (c) Pyro Solver
 - (d) Flip Tank
2. The purpose of grouping attributes in Houdini is
 - (a) To manage particle effects
 - (b) To organize and manipulate data
 - (c) To create fire simulations
 - (d) To adjust lighting
3. _____ node in Houdini is primarily used to simulate smoke.
 - (a) Flip Solver (b) Pyro Solver
 - (c) Vellum Solver (d) RBD Solver

4. The feature in Houdini used to create and manage fire simulations is
 - (a) Pyro Burst Source (b) Flip Tank
 - (c) Vellum Cloth (d) SDF Volume
5. The primary function of the POP Network in Houdini is
 - (a) Simulating fluids
 - (b) Particle simulation
 - (c) Creating fire effects
 - (d) Modelling static objects
6. The component used to control particle forces in Houdini is
 - (a) VOP Network
 - (b) Particle Forces
 - (c) VEX Programming
 - (d) Pyro Solver
7. The tool in Houdini used to fracture geometry is
 - (a) Boolean Fracture (b) Pyro Burst Source
 - (c) VOP Network (d) Flip Solver
8. Vellum in Houdini simulates
 - (a) Fire and explosions
 - (b) Rigid bodies
 - (c) Soft bodies and cloth
 - (d) Fluid dynamics
9. The Flip Tank help to create _____ in Houdini.
 - (a) Smoke (b) Fluid simulations
 - (c) Rigid body effects (d) Particle forces
10. _____ node in Houdini is used for simulating fluids with adjustable viscosity.
 - (a) Pyro Solver (b) Flip Solver
 - (c) Vellum Brush (d) RBD Cluster

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) How VOP Network enhances procedural workflows in Houdini? Explain.

Or

- (b) What are the limitations of Houdini's interface for traditional modelling techniques?

12. (a) Describe how SDF volumes contribute to creating complex smoke and fire effects.

Or

- (b) How do you incorporate sparks into fire simulations in Houdini?

13. (a) Explain the concept of particle advection and its application in particle simulations.

Or

- (b) Describe how particle advection is used to create static particle effects.

14. (a) How does RBD Activation compare to fluid viscosity adjustments?

Or

- (b) Explain the difference between Vellum Grains and particle systems in Houdini.

15. (a) Describe how the Pyro Solver is utilized for fluid simulations.

Or

- (b) Describe the Flip Solver's use for simulating explosions.

Part C

(5 × 8 = 40)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain how procedural modelling is achieved in Houdini using nodes and networks.

Or

- (b) What role do grouping attributes play in managing data within Houdini? Explain in detail.

17. (a) Explain how the Pyro Solver is used to simulate and render smoke effects in Houdini.

Or

- (b) Describe the role of the Flip Solver in creating smoke simulations.

18. (a) Describe how the POP Network manages particle simulations in Houdini.

Or

- (b) Explain the use of the Pyro Network for particle simulation tasks.

19. (a) Explain the use of Boolean Fracture for breaking apart geometry in Houdini.

Or

- (b) Describe how the Pyro Burst Source is used for fracturing geometry.

20. (a) Explain how the Flip Solver is used for simulating fluid dynamics in Houdini.

Or

- (b) What is the purpose of the Flip Tank in fluid simulations? Explain in detail.

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Sub. Code

82946

B.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Visual Effects

**VFX PRODUCTION IV (MATCHMOVE/ROTOMATION
AND CG COMPOSITING)**

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. The match moving helps to _____.
 - (a) Combine CGI with live-action footage
 - (b) Create 3D models
 - (c) Edit audio
 - (d) Design websites

2. _____ tool allows you to view tracking points in 3D Equalizer.
 - (a) Properties Bin (b) Viewer
 - (c) Timeline (d) Menu Tab

3. The main purpose of the Menu Tab in 3D Equalizer _____.
- (a) To view the project
 - (b) To edit audio
 - (c) To access different tools and settings
 - (d) To create animations
4. The manual tracking is used for _____.
- (a) Adjusting colors
 - (b) Tracking points in footage by hand
 - (c) Rendering 3D models
 - (d) Adding sound effects
5. An error graph show _____ in tracking.
- (a) The color balance
 - (b) Tracking accuracy
 - (c) Light intensity
 - (d) Audio levels
6. The purpose of setting keys in rotomation is _____.
- (a) To define positions in animation
 - (b) To adjust lighting
 - (c) To edit textures
 - (d) To create shadows

7. A fresnel effect _____ in CG compositing.
- (a) Adds shadows
 - (b) Adjusts color grading
 - (c) Creates reflections on surfaces
 - (d) Changes the image resolution
8. A multi-pass EXR file in compositing is _____.
- (a) To store different layers of an image separately
 - (b) To increase file size
 - (c) To edit audio
 - (d) To create 3D models
9. The Z Depth information shows _____.
- (a) The color of objects
 - (b) The distance of objects from the camera
 - (c) The texture of surfaces
 - (d) The brightness of lights
10. The benefit of bridging 3D Equalizer with Maya is _____.
- (a) To combine tracking data with 3D models
 - (b) To edit sound effects
 - (c) To adjust color grading
 - (d) To increase rendering speed

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Mention the purpose of matchmoving in visual effects.

Or

- (b) Describe the importance of the Menu Tab in 3D Equalizer.

12. (a) Write a brief note on the process of creating a mesh for tracking.

Or

- (b) Explain the process and importance of assigning a camera during object tracking.

13. (a) Explain how rotomation can be used to create realistic characters in animated films.

Or

- (b) Explain the steps involved in setting keys for animation during rotomation.

14. (a) Analyse the purpose of multi-pass EXR files in compositing.

Or

- (b) Discuss the challenges and techniques involved in accurately simulating the Fresnel effect in real-time rendering.

15. (a) What is Z Depth and why is it important in creating realistic 3D scenes.

Or

- (b) Discuss the role of atmospheric fog in enhancing the depth and realism of CG environments.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Describe the importance of tracking points in 3D Equalizer for accurate matchmoving.

Or

- (b) Explain the function of the Properties Bin in 3D Equalizer and its role in managing project data.

17. (a) Describe a comprehensive process for evaluating the performance of an object tracker using various metrics and visualizations.

Or

- (b) Discuss how data points are used in manual tracking and the significance of the error graph in this context.

18. (a) Explain the significance of rotomation in the visual effects and animation industry. Mention how it differs from traditional animation and rotoscoping techniques.

Or

- (b) Explain the process of exporting rotomation data from animation software.

19. (a) What is the Fresnel effect and how does it improve reflections in CG compositing?

Or

- (b) How is the Fresnel effect used to make surfaces look more realistic?

20. (a) Discuss how creating CG imperfections can enhance the authenticity of rendered scenes.

Or

- (b) Describe the role of Normals in shading and rendering processes.
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C-4638

Sub. Code

82923

B.Sc. DEGREE EXAMINATION, APRIL 2025.

Second Semester

Visual Effects

**MOTION GRAPHICS
(Creative and Social Informatics)**

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. Define motion graphics.
2. State the function of graphics design.
3. What does mean by achromatic color?
4. State the importance of warm color.
5. State any two principles of Animation.
6. What is frame range animation?
7. Define Blending modes.
8. State the function of previewing Animation.
9. What are the factors considering for usages of light?
10. Write the important role of the Aperture.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write briefly about 3D motion graphics.

Or

- (b) Illustrate in detail about kinematic Typography.

12. (a) Write a short note on importance of color motion graphics.

Or

- (b) State in detail about Tetrad colors for motion.

13. (a) Illustrate in detail about squash and stretch.

Or

- (b) Explain in detail about Follow through and overlapping action.

14. (a) Write a short note on cut out animation.

Or

- (b) Illustrate step by step stages of image file formats and their usages.

15. (a) Explain in detail about use of 3D layers.

Or

- (b) State in detail about camera lens focal length and depth of fields.

Part C

(3 × 10 = 30)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail about kinematic typography.

Or

- (b) Illustrate in process of color Psychology for motion graphics.

17. (a) Define about 2D motion graphics and its application explain in detail.

Or

- (b) State in detail about frame range animation.

18. (a) Explain in brief about elements of motion graphics genre and targeted audience.

Or

- (b) Write short note on camera movements Pan, Tilt and Dolly.
