C–8194

Sub. Code
83814

M.Sc. DEGREE EXAMINATION, APRIL 2026

First Semester

Multimedia

SCRIPTING & STORYBOARDING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the primary function of budget planning in filmmaking?

   (a) To outline the film's script

   (b) To allocate resources for various production activities

   (c) To identify the film's target audience

   (d) To cast actors

2. In commercial-based story writing, which of the following is most crucial?

   (a) Character development

   (b) Pacing and timing

   (c) Market trends and audience preferences

   (d) Plot twists

3. Which term refers to the technique of writing a screenplay that is broken down into different scenes?

(a) Slug line

(b) Action description

(c) Scene breakdown

(d) Shot list

4. What is the purpose of "Action" in a screenplay?

(a) To describe the character's movement or activity in a scene

(b) To provide dialogue for characters

(c) To set the location of the scene

(d) To introduce the main plot

5. Which of the following shot types is used to capture an entire scene or landscape?

(a) Extreme long shot

(b) Close-up

(c) Medium shot

(d) Over-the-shoulder shot

6. What is the purpose of a "pan" in filmmaking?

(a) To transition between scenes

(b) To follow the movement of a subject

(c) To zoom in on an object

(d) To rotate the camera on a vertical axis

7. Which of the following is a common transition used in filmmaking to show the passage of time?

(a) Cut

(b) Dissolve

(c) Zoom

(d) Truck Out

8. When sketching characters in a film, what is most important to depict?

(a) Their personality and emotions

(b) Their physical features only

(c) Their actions

(d) Their dialogue

9. What does "tilt up" refer to in camera movements?

(a) Moving the camera horizontally

(b) Zooming in on an object

(c) Moving the camera vertically

(d) Rotating the camera around an axis

10. What is the purpose of adding shot descriptions to storyboards?

(a) To show the location of the scene

(b) To detail the camera movements and special effects

(c) To indicate the characters' lines

(d) To provide the final script

Part B (5 × 5 = 25)

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

11. (a) Explain the importance of storytelling in documentary-based writing.

Or

(b) Discuss the steps involved in creating a budget plan for a film production.

12. (a) Discuss how the anatomy of a screenplay helps in organizing a story.

Or

(b) Describe how breaking a concept into scenes aids in structuring a screenplay.

13. (a) How do different shot types (e.g., extreme long shot, close-up) affect the viewer's perception of a scene?

Or

(b) Discuss the role of transitions in helping to convey a seamless narrative in filmmaking.

14. (a) Discuss the significance of sketching props and accessories in creating a visual identity for a film

Or

(b) Explain how background sketches contribute to the overall atmosphere and realism of a scene.

15. (a) Explain the role of shot panels in ensuring visual continuity in a film.

Or

(b) Discuss how adding camera movement arrows and special effects descriptions help in the staging process.

Part C (5 × 8 = 40)

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

16. (a) Discuss the importance of product-based story writing in commercial filmmaking and its impact on the audience.

Or

(b) Explain how documentary-based storytelling differs from narrative storytelling in terms of structure and impact.

17. (a) Discuss the significance of the "Beginning, Middle. and End" structure in creating a compelling screenplay.

Or

(b) Explain how the anatomy of a screenplay contributes to narrative pacing and character development.

18. (a) Discuss how various shot types contribute to the emotional depth and storytelling of a film.

Or

(b) Explain the importance of camera movements like zoom, tilt, and pan in conveying the mood of a scene.

19. (a) Describe how sketching character personalities and costumes helps in defining the visual representation of a character.

Or

(b) Explain how sketching backgrounds (exteriors and interiors) sets the tone and atmosphere of a film.

20. (a) Discuss the role of staging techniques in composing shots that ensure continuity in a film.

Or

(b) Explain how shot descriptions, camera movements, and special effects details contribute to the overall cinematic experience.

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C–8195

Sub. Code
83821

M.Sc. DEGREE EXAMINATION, APRIL 2026

Second Semester

Multimedia

2D DIGITAL ANIMATION TECHNIQUES

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the primary purpose of the "line of action" in character sketching?

   (a) To define shading direction

   (b) To guide the movement of a character

   (c) To determine color scheme

   (d) To enhance background layout

2. Which character type is commonly designed with exaggerated muscles and proportions?

   (a) Cute character

   (b) Mad character

   (c) Heavy villainous character

   (d) Alien character

3. Which principle of animation involves preparing the audience for an action?

(a) Anticipation (b) Staging

(c) Follow through (d) Arcs

4. What does "pose to pose" animation emphasize?

(a) Random action

(b) Smooth transition of frames

(c) Key positions of action

(d) Audio alignment

5. What is tweening in computer animation?

(a) Audio editing

(b) Generating in-between frames

(c) Background rendering

(d) Layer creation

6. In rigging, why are pivot points important?

(a) For color matching

(b) For rendering quality

(c) For defining movement rotation

(d) For masking layers

7. What is onion skinning used for in animation?

(a) Color separation

(b) Frame-by-flame comparison

(c) Audio balancing

(d) Creating dialogue

8. Which technique is used to animate a running character?

(a) Lip syncing

(b) Classic motion guide

(c) Run cycle

(d) Mask animation

9. Which tool is essential for aligning mouth shapes with dialogue?

(a) Pivot editor (b) Lip sync tool

(c) Tweening tool (d) Timeline grid

10. What type of sounds are "plosives" in lip sync animation?

(a) Vowel sounds

(b) Musical tones

(c) Consonant sounds

(d) Ambient background

Part B ($5 \times 5 = 25$)

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

11. (a) Explain the essentials of character design with suitable examples.

Or

(b) Write about male and female body proportions used in character modeling.

12. (a) Describe the principles of animation focusing on "squash and stretch" and "anticipation".

Or

(b) Write a note on the role of "staging" and "solid drawing" in animation.

13. (a) Discuss the use of symbols and tweening in computer animation.

Or

(b) Explain the importance of dissecting body parts and rigging in 2D character animation.

14. (a) Describe how a walk cycle and run cycle are created in animation.

Or

(b) Explain background panning and its effect on animation storytelling.

15. (a) Write a short note on the process of lip syncing and the phonetic breakdown of vowels.

Or

(b) Explain the steps involved in preparing an animation demo reel.

Part C

(5 × 8 = 40)

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

16. (a) Elaborate on the anatomy principles for human and animal characters used in 2D animation.

Or

(b) Discuss character types in 2D animation with emphasis on personality exaggeration, and function.

17. (a) Describe in detail the twelve principles of animation and their significance.

Or

(b) Write an essay on traditional vs digital animation techniques in 2D.

18. (a) Explain the timeline workflow in digital animation and the process of preparing a character for animation.

Or

(b) Discuss symbol creation, layering, and setting pivot points for motion in 2D animation.

19. (a) Write an essay on different types of animation cycles and the creation of special effects.

Or

(b) Explain the complete process of classic motion guide with ball animation and onion skin technique.

20. (a) Describe how lip syncing is implemented in anime-style animation with an example.

Or

(b) Discuss the importance and structure of a professional animation demo reel.

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C–8196	Sub. Code 83822

M.Sc. DEGREE EXAMINATION, APRIL 2026

Second Semester

Multimedia

ADVANCED 3D DESIGN AND VISUALIZATION METHODS

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Which viewport provides a realistic 3D visual of the scene?

   (a) Orthographic view

   (b) Front view

   (c) Top view

   (d) Perspective view

2. Which tool is used to reverse the direction of a curve?

   (a) Curve mirror

   (b) Reverse curve direction

   (c) Detach curve

   (d) Attach curve

3. What does the “extrude” tool do in polygon modeling?

(a) Applies lighting effects

(b) Animates a curve

(c) Extends a face or edge into a new polygon

(d) Reduces object resolution

4. Which of the following is used to combine polygon objects into one?

(a) Booleans

(b) Append tool

(c) Combine

(d) Stitch tool

5. What is a hypershade used for in 3D modeling?

(a) Lighting setup

(b) Animation control

(c) Material and texture editing

(d) Object grouping

6. What is the process of reducing mesh complexity called?

(a) Booleans

(b) Subdivision

(c) Polygon reduction

(d) Rigging

7. What is "IK" used for in rigging?

(a) Rendering settings

(b) Joint deformation control

(c) Curve animation

(d) Shading effects

8. What does the time slider control in animation?

(a) Texture quality

(b) Lighting transitions

(c) Keyframe playback range

(d) Rendering angle

9. Which light casts parallel rays in a 3D scene?

(a) Spot light (b) Area light

(c) Directional light (d) Volume light

10. What is Batch Rendering" used for?

(a) Exporting models

(b) Editing animation

(c) Rendering multiple frames at once

(d) Creating UV maps

Part B ($5 \times 5 = 25$)

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

11. (a) Describe how to create and manipulate curves in a 3D workspace.

Or

(b) Write about the use of orthographic and perspective views in design visualization.

12. (a) Explain how polygon Boolean operations are performed.

Or

(b) Describe the steps for rebuilding surfaces and creating surface fillets.

13. (a) Discuss the process of applying textures using hypershade.

Or

(b) Explain the method of modeling a tabletop prop using polygon tools.

14. (a) Define FK and IK rigging techniques and their differences.

Or

(b) Describe how to edit keyframes and timing using the graph editor.

15. (a) Explain the use of various light types in a 3D scene.

Or

(b) Describe the process of setting render globals and rendering an image.

Part C (5 × 8 = 40)

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

16. (a) Explain the process of creating and editing curves including attaching, detaching and inserting knots.

Or

(b) Discuss the use of the curve editing tool and its importance in organic modeling.

17. (a) Describe the entire polygon modeling process including extrusion, mirroring and smoothing.

Or

(b) Write an essay on the use of NURBS and polygons in complex surface modeling.

18. (a) Explain step-by-step how to texture a robot model using hypershade.

Or

(b) Describe modeling an exterior shot and the application of textures for realism.

19. (a) Discuss the complete character rigging workflow with joints, skinning and constraint types.

Or

(b) Elaborate on timing keyframes, play back settings and animating a walk cycle.

20. (a) Describe camera creation, resolution gate and how to convert 3D scenes to 2D renders.

Or

(b) Explain in detail the lighting theory, shadow types and their role in final rendering.

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C–8197

Sub. Code
83823

M.Sc. DEGREE EXAMINATION, APRIL 2026

Second Semester

Multimedia

EXPLAINER VIDEO PRODUCTION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the primary function of keyframes in motion graphics?

   (a) Rendering files

   (b) Importing assets

   (c) Animating properties over time

   (d) Editing audio

2. Which of the following is a view option in a motion graphics workspace?

   (a) 3D Mesh

   (b) Topology Grid

   (c) RAM Preview

   (d) Proxy Server

3. In After Effects, which tool allows freehand drawing of shapes and strokes?

(a) Type Tool

(b) Brush Tool

(c) Pen Tool

(d) Clone Stamp Tool

4. What does the "Opacity" property control in a layer?

(a) Size

(b) Rotation

(c) Transparency

(d) Speed

5. "Which method is used to isolate a subject from the background using a solid color?

(a) Rotoscoping (b) Keying

(c) Masking (d) Blending

6. What is the purpose of 2D tracking?

(a) Animate in 3D space

(b) Match camera movement

(c) Stabilize shaky footage

(d) Compress video

7. Which format is commonly used for importing audio in motion graphics projects?

(a) PSD (b) PNG

(c) MP3 (d) TGA

8. What is the function of a render queue in Alter Effects?

(a) Create 3D objects

(b) Apply masking effects

(c) Export final output

(d) Preview video in browser

9. What does "CC Particle World' generate in a scene?

(a) Color correction layer

(b) Particle-based animation

(c) 3D lighting effects

(d) Audio sync layers

10. Which tab is used to apply animation presets in After Effects?

(a) Window

(b) Edit

(c) Effects & Presets

(d) Timeline

Part B $(5 \times 5 = 25)$

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

11. (a) Describe the compositing techniques used in motion graphics production.

Or

(b) Explain the use of animation and keyframes for layer transformation.

12. (a) Discuss the use of painting tools and animation presets.

Or

(b) Explain how typography animation is achieved in After Effects.

13. (a) Write a short note on keying and the use of Keylight.

Or

(b) Describe the process of 2D tracking and stabilization.

14. (a) Explain how text layers are animated with audio syncing in a project.

Or

(b) Describe the role of render formats and video formats in motion graphics.

15. (a) Write about the use of the animation composer and particle world in visual design.

Or

(b) Describe how to create a 4-color gradient background using built-in effects.

Part C (5 × 8 = 40)

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

16. (a) Explain the complete workflow of creating a motion graphic composition, including interface, layering, and previews.

Or

(b) Write an essay on the different types of compositing and layer-based workflow in explainer video production.

17. (a) Describe the rendering and exporting pipeline, including expressions and marker use.

Or

(b) Elaborate on automation tools and keyframe interpolation in animation projects.

18. (a) Explain the difference between masking and rotoscoping and describe spline control tools.

Or

(b) Write about 3D tracking and match moving techniques in motion graphics.

19. (a) Discuss the workflow for creating a corporate explainer video using text and audio.

Or

(b) Explain the import of 3D text and its integration with After Effects effects and presets.

20. (a) Write a detailed note on particle system animation and the use of animation composer in presentation videos.

Or

(b) Describe how to set up a render queue assign output formats and export a final explainer video.

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C–8198	Sub. Code 83824

M.Sc. DEGREE EXAMINATION, APRIL 2026

Second Semester

Multimedia

VIDEO AND AUDIO EDITING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the main purpose of the timeline in video editing software?

   (a) Exporting audio files

   (b) Applying color correction

   (c) Arranging and editing video clips in sequence

   (d) Rendering the project

2. In non-linear editing, what does “non-destructive” refer to?

   (a) Files ale deleted permanently

   (b) Editing modifies the original clip

   (c) Original media remains untouched

   (d) Editing uses only raw formats

3. What is the function of "three-point editing"?

(a) Adds special effects

(b) Combines multiple transitions

(c) Defines in- out, and timeline insert points

(d) Automatically creates keyframes

4. What is a "safe zone" in video titling?

(a) A secure file format

(b) An area that ensures visible display across all screens

(c) A rendering backup folder

(d) A soundproofing feature in audio

5. What does the keyframe timeline control in editing?

(a) Audio mixing channels

(b) Color balance

(c) Changes over time for effects or parameters

(d) Storage management

6. Which editing tool enables smooth shifting of a clip's in/out point while retaining its duration?

(a) Razor tool (b) Ripple edit

(c) Slide tool (d) Slip tool

7. What is the function of the Audio Mixer Window?

(a) To trim video edges

(b) To apply subtitles

(c) To balance and mix multiple audio tracks

(d) To create animated transitions

8. What does a video codec do?

(a) Cuts the video into clips

(b) Adds background music

(c) Compresses video for playback or export

(d) Renders still images

9. What is the sample rate used for in audio editing?

(a) To calculate frame rate

(b) To define the brightness

(c) To determine audio quality and resolution

(d) To trim silence

10. What is the primary purpose of reverb in audio effects?

(a) Remove noise

(b) Add depth and space to sound

(c) Normalize pitch

(d) Balance stereo channels

Part B

$(5 \times 5 = 25)$

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

11. (a) Explain the functions of the monitor window and program view in the video editing interface.

Or

(b) Describe the steps involved in editing clips into a sequence using a non-linear editor.

12. (a) Discuss the process of using overlay and insert edits with three-point editing.

Or

(b) Write a short note on transitions and how they are applied and aligned.

13. (a) Explain how keyframes are used to control effects over time.

Or

(b) Describe the method to apply and adjust filter effects in a video sequence.

14. (a) Discuss the steps to customize rendering format and export a file with suitable settings.

Or.

(b) Describe the process of creating a storyboard and applying basic audio edits.

15. (a) Explain audio file formats and the use of stereo and mono channels in editing.

Or

(b) Write a short note on pitch change and audio noise reduction techniques.

Part C (5 × 8 = 40)

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

16. (a) Describe the editing process using non-linear tools including timecode, in/out points, and timeline controls.

Or

(b) Explain the difference between interlaced and progressive scan video arid their relevance in editing.

17. (a) Write an essay on trimming methods using slip, slide and ripple edits.

Or

(b) Discuss how transitions and effects are controlled through the Effects Control Window.

18. (a) Explain how to display, apply, and remove Keyframes while editing video effects.

Or

(b) Describe how audio clips are previewed, filtered, and synchronized with video.

19. (a) Discuss the rendering workflow including codecs. compression and export settings.

Or

(b) Write an essay on audio editing using the mixer window and render menu.

20. (a) Explain the complete workflow of mixing voice and music, adjusting delay, reverb and amplitude.

Or

(b) Describe the types of microphones, acoustic setup, and how audio is exported for final use.

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C–8199	Sub. Code 83831

M.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Multimedia

MODELING AND TEXTURING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Which of the following is used to create and manipulate objects in a 3D workspace?

   (a) Lighting tool

   (b) Curve editing tool

   (c) Texture mapping tool

   (d) Sculpting tool

2. What is the main purpose of using the polygon Boolean tool?

   (a) To smooth out polygons

   (b) To combine or subtract polygon shapes

   (c) To create normal maps

   (d) To set up camera angles

3. Which of the following tools is essential for editing NURBS (Non-Uniform Rational B-Splines)?

(a) Polygon smooth tool

(b) Curve editing tool

(c) NURBS editing tool

(d) Sculpting brush

4. "What is the primary function of extruding polygon faces and edges?

(a) To add texture

(b) To create depth or volume in a shape

(c) To edit object curves

(d) To apply lighting

5. Which tool is used to reverse the direction of a curve in 3D modeling?

(a) Curve editor

(b) Rebuild surface tool

(c) Reverse curve direction tool

(d) Polygon extrude tool

6. What does symmetric sculpting ensure in character modeling?

(a) That both sides of the character are modeled similarly

(b) The addition of textures

(c) The manipulation of curves

(d) The sculpting of detailed props

7. What is the purpose of unwrapping the chair pans before texturing?

(a) To adjust the lighting

(b) To flatten the parts for better texture application

(c) To add shadow effects

(d) To merge the polygons

8. How does a normal map help in 3D texturing?

(a) It adds color details to the texture

(b) It creates realistic light reflections

(c) It adds surface detail information without altering the model's geometry

(d) It simulates different material types

9. What is the role of HDRI in 3D lighting?

(a) To create reflections

(b) To simulate realistic lighting environments

(c) To control shadow effects

(d) To create ambient light

10. What is the function of a specular pass in rendering?

(a) To define the object's shadows

(b) To capture the object's light reflections

(c) To control object color

(d) To enhance the depth of the scene

Part B (5 × 5 = 25)

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

11. (a) Describe the process of creating and manipulating objects in 3D software.

Or

(b) Explain the role of the polygon Boolean tool in 3D modeling.

12. (a) Discuss the importance of character topology in 3D modeling.

Or

(b) Explain how applying materials and textures enhances the realism of a 3D object like an office chair.

13. (a) Explain how sculpting tools and brushes are used to create character details in 3D modeling

Or

(b) Discuss the role of symmetric and asymmetric sculpting in creating 3D characters.

14. (a) Explain the importance of unwrapping the model before texturing.

Or

(b) Describe the process and benefits of baking normal maps in 3D texturing.

15. (a) Discuss the common types of lighting used in 3D rendering and their respective functions.

Or

(b) Explain how ray-traced shadows enhance the realism of 3D renders.

Part C (5 × 8 = 40)

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

16. (a) Discuss the significance of creating and manipulating curves in 3D modeling and how they contribute to the overall design.

Or

(b) Explain the process of extruding polygon faces and edges and its role in object modeling.

17. (a) Discuss the advantages of symmetric sculpting for character creation.

Or

(b) Explain how texture maps are created through sculpting and how they contribute to a character's realism.

18. (a) Describe the role of hyper shade in understanding materials and textures in 3D software.

Or

(b) Explain the importance of photograph manipulation in creating realistic textures for 3D models.

19. (a) Discuss the types of lights used in 3D rendering, including spotlights, directional lights and volume lights.

Or

(b) Explain how global illumination and HDRI contribute to achieving realistic lighting effects in 3D scenes.

20. (a) Describe the advanced rendering techniques and passes (e.g., diffuse, specular, Z-depth) used to produce high-quality 3D images.

Or

(b) Explain how rendering engines like Mental Ray and Vray are utilized in advanced 3D rendering processes.

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C–8200	Sub. Code 83832

M.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Multimedia

ADVANCED RIGGING & ANIMATION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the purpose of renaming structure in character rigging?

   (a) To adjust skin weights

   (b) To organize and identify rig components

   (c) To create facial expressions

   (d) To control movement of props

2. In character rigging, what does constricting a shoulder joint involve?

   (a) Adding spline IK control

   (b) Setting up the FK control system

   (c) Adding elbow joint

   (d) Adding control for shoulder movement

3. What is the function of a set driven key in rigging?

(a) To animate the object's movement

(b) To control the behavior of one attribute based on another

(c) To create facial animation

(d) To refine skinning weights

4. Which of the following describes the purpose of the spline IK system in character rigging?

(a) To control the character's fingers

(b) To create realistic spine movements

(c) To animate facial expressions

(d) To control the leg movements

5. What does painting weights in skinning achieve?

(a) To animate the character's joints

(b) To define how much influence each joint has on the mesh

(c) To create facial expressions

(d) To apply textures to the mesh

6. What does the term "breaking down passes" refer to in animation?

(a) Setting the final animation poses

(b) Creating extreme poses in animation

(c) Refining and adjusting timing between keyframes

(d) Applying texture maps to the model

7. Which animation tool is used for creating variations in a character's movements?

(a) Animation layers

(b) Graph editor

(c) Camera tool

(d) Keyframe editor

8. What is the significance of the blocking stage in animation?

(a) To set up initial key poses and timing

(b) To finalize facial expressions

(c) To create the final render

(d) To adjust lighting effects

9. What is the purpose of adjusting the orientation in Mo-cap data?

(a) To match the animation style to the custom rig

(b) To control the camera movements

(c) To adjust lighting br realistic effects

(d) To define the characters personality

10. What role do facial references play in animation?

(a) To create natural character movements

(b) To provide guidelines for realistic facial expressions

(c) To assist in skinning the character

(d) To animate the character's body movement

Part B (5 × 5 = 25)

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

11. (a) Explain the role of deformers in rigging and their types.

Or

(b) Discuss the process of analyzing a prop rig and its workflow with constrained objects.

12. (a) Describe the construction of leg joints and foot controls in character rigging.

Or

(b) Discuss how upper body controls arc constructed in character rigging.

13. (a) Explain the importance of adding finger joints and controls in character rigging.

Or

(b) Discuss how facial joints and controls are created and their significance in animation.

14. (a) Discuss the concept of character skinning and adjusting paint weights.

Or

(b) Explain how mirroring weights helps in finalizing the characters rigging process.

15. (a) Describe the principles of animation and how they are applied to a ball with leg walk movement.

Or

(b) Discuss how animation layers work and their application in creating variations in animations.

Part C ($5 \times 8 = 40$)

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

16. (a) Explain the process of building an IK and FK control system and how they are used in animating a character.

Or

(b) Discuss the significance of constructing shoulder, neck and head bones in character rigging and animation.

17. (a) Explain the steps involved in the process of facial animation and the creation of facial controls.

Or

(b) Discuss the role of eye and eyebrow movements in animating a character's facial expressions.

18. (a) Describe the process of source data preparation in Mo-cap animation and the retargeting process to a custom rig.

Or

(b) Discuss the issues that arise during the integration of Mo-cap data and how they are solved.

19. (a) Discuss the different animation tools used in creating a character's walk cycle.

Or

(b) Explain how animation principles like timing and spacing are applied to a character's actions with props.

20. (a) Explain the importance of using Mo-cap data in animation and how retargeting improves the animation process.

Or

(b) Discuss the process of refining animation using Mo-cap data and solving orientation issues.

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C–8201	Sub. Code 83833

M.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Multimedia

ADVANCED LIGHTING & RENDERING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is the primary function of the Fill Light in a Three Point Lighting setup?

   (a) To add highlights to the subject

   (b) To soften the shadows cast by the Key Light

   (c) To create a strong backlight

   (d) To illuminate the entire background

2. Which of the following is a characteristic of hard light in 3D rendering?

   (a) Soft shadows

   (b) High intensity

   (c) Smooth transitions

   (d) No shadows

3. In what scenario would you use an ambient light in 3D lighting?

(a) To create highly defined shadows

(b) To add general illumination to the scene

(c) To enhance the contrast between light and dark areas

(d) To control the light throw and pattern

4. What does the term "Light Throw" refer to in 3D lighting?

(a) The color of the light source

(b) The direction and spread of light across the scene

(c) The intensity of light

(d) The reflection of light on surfaces

5. What type of lighting is used to simulate the effect of sunlight in a 3D outdoor scene?

(a) Back Light (b) Ambient Light

(c) Key Light (d) Directional Light

6. What is the function of the Back Light in a Three Point Lighting setup?

(a) To soften the shadows of the subject

(b) To add highlights to the background

(c) To create separation between the subject and background

(d) To illuminate the entire Scene

7. What is the primary purpose of using Raytracing in 3D rendering?

(a) To create shadows

(b) To simulate light bounce and reflections

(c) To generate depth of field

(d) To control animation layer

8. What does Gamma Correction address in 3D rendering?

(a) The adjustment of contrast and brightness levels

(b) The simulation of light sources

(c) The reduction of motion blur

(d) The creation of reflections

9. How does motion blur affect the realism of animated scenes?

(a) It increases the sharpness of moving objects

(b) It simulates the effect of camera movement or high-speed motion

(c) It creates a static scene

(d) It softens the light in the scene

10. What is the effect of using transparency support in lighting in 3D rendering?

(a) To create soft shadows

(b) To enhance reflection quality

(c) To simulate glass, water or other transparent materials

(d) To soften the light intensity

Part B (5 × 5 = 25)

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

11. (a) Describe the process of integrating lighting with geometry and shading in 3D production.

Or

(b) Discuss the role of light properties like diffuse and specular in the rendering process.

12. (a) Explain the visual function of shadows in 3D rendering and how different types of shadows (hard and soft) contribute to realism.

Or

(b) Discuss the use of shadow brightness in 3D rendering and how ambient and fill lights can brighten shadows.

13. (a) How does light animation enhance the visual experience in 3D rendering and what parameters can be animated?

Or

(b) Discuss the impact of color temperature on lighting and how warm and cool colors affect the mood of a scene.

14. (a) Discuss the exposure settings used in 3D rendering, including aperture, F-stops, and depth of Field.

Or

(b) Explain the importance of shutter speed in motion blur and its impact on rendering scenes.

15. (a) What are the benefits of using global illumination in 3D rendering, and how does photon mapping contribute to its effectiveness?

Or

(b) Describe the various rendering passes (e.g. Reflection Pass, Shadow Pass) and their role in post-production compositing.

Part C $(5 \times 8 = 40)$

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

16. (a) Explain the process of' creating a realistic Three Point Lighting setup for a portrait in 3D, detailing the function of each light.

Or

(b) Discuss the challenges in controlling light intensity and attenuation in 3D rendering for outdoor scenes.

17. (a) Discuss the relationship between light quality (hard vs. soft) and its effect on rendering results.

Or

(b) Explain how animating light parameters such as intensity and color can enhance a 3D animation.

18. (a) Explain how raytraced reflections are created in 3D rendering and their importance in achieving realism.

Or

(b) Discuss the rendering process of creating realistic shadows using Raytracing and its imitations.

19. (a) Discuss the process of creating and managing rendering layers and passes to achieve efficient post-production compositing.

Or

(b) Explain the concept of beauty pass, highlight pass, and lighting pass, and their role in final compositing.

20. (a) Discuss how global illumination techniques like caustics and photon mapping can improve the realism of a 3D scene.

Or

(b) Explain the process of rendering with high contrast and how it affects the visual outcome of a scene.

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C–8202	Sub. Code 83834

M.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Multimedia

DIGITAL CINEMATOGRAPHY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Which of the following camera types is primarily used for high-end film production?

   (a) GoPro

   (b) Canon DSLR

   (c) RED

   (d) Sony Handycam

2. Which shot type is used to focus on the subject's face or expressions?

   (a) Close Up

   (b) Medium Shot

   (c) Long Shot

   (d) Extreme Close Up

3. What is the purpose of the fill light in three-point lighting?

(a) To provide the main source of illumination

(b) To add depth to the shot

(c) To reduce shadows on the subject

(d) To highlight the background

4. What is the function of the shutter speed in a camera?

(a) To control the light entering the camera

(b) To adjust the lens aperture

(c) To control the exposure time

(d) To change the lens perspective

5. Which lens type is used to achieve a narrow field of view?

(a) Wide-angle lens (b) Telephoto lens

(c) Normal lens (d) Fisheye lens

6. What is the role of a matte box in cinematography?

(a) To reduce lens distortion

(b) To hold filters and control lens flare

(c) To increase depth of field

(d) To stabilize the camera

7. What is the primary purpose of the camera distance in shot composition?

(a) To create a visual connection with the subject

(b) To determine the exposure level

(c) To control the camera's focus

(d) To adjust the framing of the shot

8. Which type of shot is often used for showing a person in conversation?

(a) Over-the-Shoulder Shot

(b) Long Shot

(c) Medium Close Up

(d) Extreme Close Up

9. How does the aperture of a camera affect the final image?

(a) It controls the exposure of the image

(b) It determines the depth of field

(c) It changes the lens distortion

(d) It adjusts the focal length

10. Which of the following accessories is used to modify lighting in a scene?

(a) Reflector cloth (b) Crane

(c) Fluid head tripod (d) Matte box

Part B (5 × 5 = 25)

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

11. (a) Explain the importance of framing and composition in cinematography.

Or

(b) Discuss how different camera angles affect storytelling in a film.

12. (a) Describe the process of choosing the right lens for a film scene.

Or

(b) Explain how the choice of lens impacts the depth and perspective of a shot.

13. (a) What is the impact of shot size and camera distance on visual storytelling?

Or

(b) Discuss the different types of shots and how they convey meaning to the audience.

14. (a) Explain how three-point lighting works and its role in cinematographic storytelling.

Or

(b) Discuss the relationship between light intensity and visual storytelling in film.

15. (a) Describe the different types of camera accessories used in cinematography.

Or

(b) Discuss the purpose of filters and their impact on the final image.

Part C

(5 × 8 = 40)

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

16. (a) Analyze the rule of thirds and its effect on visual composition in cinematography.

Or

(b) Explain the impact of perspective and framing on the audiences perception in a scene.

17. (a) Discuss the functions of lenses and how different lens types impact film visuals.

Or

(b) Explain the concepts of lens speed and sharpness. and their role in cinematography.

18. (a) Describe the role of camera distance and shot types in developing a scene's atmosphere.

Or

(b) Discuss the importance of shot composition and its influence on visual storytelling.

19. (a) Analyze the use of lighting in film and how it contributes to the emotional tone of a scene.

Or

(b) Discuss the different lighting setups and their significance in film production.

20. (a) Examine the role of camera accessories in enhancing the cinematographic process.

Or

(b) Discuss the effects of filters and other tools on the creative process of filmmaking.

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