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M.Sc. DEGREE EXAMINATION, APRIL 2025

First Semester

Multimedia

SCRIPTING AND STORY BOARDING

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the importance of storyboarding in the production process?
 - (a) Creative concept creation
 - (b) Visualizing the sequence of scenes
 - (c) Budget planning
 - (d) Scheduling
- 2. What stage of the production process involves determining the resources required for the project?
 - (a) Budget planning (b) Script writing
 - (c) Scheduling (d) Concept creation
- 3. What is the purpose of breaking a selected concept into scenes during the scripting process?
 - (a) Introducing characters
 - (b) Developing plot twists
 - (c) Enhancing visual storytelling
 - (d) Scheduling scenes

4.	What aspect of screenplay writing involves the spoken words exchanged between characters?						
	(a)	Slug line	(b)	Action sequences			
	(c)	Dialogue	(d)	Scene description			
5.		at type of move invo ards or away from t		the camera physically moving bject?			
	(a)	Zoom in	(b)	Tilt up			
	(c)	Truck in	(d)	Pan left			
6.		ich transition inv tening of the screen					
	(a)	The cut	(b)	Zoom out			
	(c)	Fade in	(d)	Tilt down			
7.	Whe	en developing sk essories" typically i		es for props, what does e?			
	(a)	Vehicles	(b)	Facial features			
	(c)	Poses	(d)	Weapons			
8.	What is the primary purpose of sketching the features of exteriors in different perspectives?						
	(a)	To showcase chara	acter	costumes			
	(b)	(b) To highlight facial expressions					
	(c)	To capture buildir	ng det	ails from various angles			
	(d)	To emphasize char	racte	r poses			
9.		When checking overall flow of continuity in story boarding, what aspect are you primarily evaluating?					
	(a)	(a) Shot compositions					
	(b)	Dialogues					
	(c)	Camera transition	ıs				
	(d)	Consistency between	een sl	nots			
			2	C-5440			

4.

- 10. What is the final step in storyboarding that involves adding textual elements to the visual panels?
 - (a) Drawing shot panels
 - (b) Composing characters, backgrounds and props
 - (c) Adding shot descriptions
 - (d) Indicating camera movement arrows

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

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

11. (a) Discuss the significance of storyboarding in the production process, detailing how it aids in visualizing scenes, planning shots, and ensuring a cohesive narrative flow.

Or

- (b) Examine the key components of budget planning in film production, considering factors such as equipment, locations, talent, and post-production expenses.
- 12. (a) Elaborate on the significance of breaking down a selected concept into scenes during the scripting process, examining how it aids in the visual development of the story.

Or

(b) Examine the components of individual scenes in a screenplay, including slug lines, action sequences, and dialogue, and discuss how they contribute to the overall narrative.

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13. (a) Examine the concept of point of view (POV) shots, analyzing how they provide a subjective experience for the audience and contribute to character engagement.

Or

- (b) Evaluate the importance of transitions in filmmaking, focusing on techniques like the cut, fade in, and fade out, and how they influence the flow of the narrative.
- 14. (a) Examine the process of developing sketches for props, accessories, weapons, and vehicles, highlighting the importance of detailed visual elements in script visualization.

Or

- (b) Evaluate the role of costume sketches in character development, analyzing how they contribute to conveying personality traits and enhancing the overall visual appeal of a script.
- 15. (a) Examine the importance of checking overall flow for continuity in storyboarding, considering how consistency between shots contributes to the overall coherence of the story.

Or

(b) Evaluate the significance of adding shot descriptions in storyboarding, discussing how textual elements enhance the interpretation and communication of visual panels.

C-5440

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

16. (a) Discuss the importance of one-line script writing in film production, examining how it serves as a concise representation of the entire script and aids in pitching the project to stakeholders.

Or

- (b) Explore the role of scheduling in film production, discussing how effective scheduling ensures the smooth execution of the project, considering factors such as location availability, talent schedules, and post-production timelines.
- 17. (a) Elaborate on the concept of the beginning, middle, and end in screenplay anatomy, examining how these structural elements contribute to engaging storytelling and audience satisfaction.

Or

- (b) Explore the importance of visual storytelling in screenplay writing, discussing how scene descriptions, slug lines, and action sequences contribute to creating a compelling and immersive cinematic experience.
- 18. (a) Explore the techniques and creative considerations involved in transitions between scenes, comparing the effects of cuts, fades, and other transition methods on the viewer's experience.

Or

(b) Elaborate on the visual storytelling potential of point of view (POV) shots, discussing how they immerse the audience in the character's perspective and enhance the overall narrative impact.

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19. (a) Explore the creative process of sketching props, accessories, weapons, and vehicles, considering how these visual elements contribute to world-building and character dynamics in a script.

Or

- (b) Elaborate on the role of facial features in character sketching for a script, discussing how expressions and details contribute to conveying emotions, relationships, and the overall tone of the story.
- 20. (a) Explore the process of adding dialogues to storyboards, discussing how this textual element complements the visual components and enhances the narrative quality of the story board.

Or

(b) Elaborate on the overall workflow of storyboarding, from drawing shot panels to adding shot descriptions and checking for continuity, emphasizing the collaborative and iterative nature of the process in script development.

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M.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Multi Media

2D DIGITAL ANIMATION TECHNIQUES

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Which element is NOT typically considered when designing a character's aesthetics?
 - (a) Target audience
 - (b) Character's background
 - (c) Character's vocal pitch
 - (d) Exaggerated characteristics
- 2. In animal anatomy, what is the primary difference between a quadruped and a biped?
 - (a) Number of limbs
 - (b) Type of fur or feathers
 - (c) Shape of the skull
 - (d) Size of the eyes

- 3. The principle of exaggeration in animation is used to
 - (a) Create realistic and understand movements
 - (b) Amplify actions and emotions to make them more expressive and impactful
 - (c) Maintain consistent proportions throughout the animation
 - (d) Define the character's static poses
- 4. The principle of anticipation is used to
 - (a) Show the character's immediate reaction
 - (b) Indicate a character's next move or action before it happens
 - (c) Establish the background setting
 - (d) Create secondary actions
- 5. What is the first step in preparing a character for animation in computer animation software?
 - (a) Applying textures to the character
 - (b) Rigging the character with a skeleton
 - (c) Dissecting the character into separate symbols
 - (d) Adding sound effects
- 6. The principle of easing in and out is used to
 - (a) Create abrupt and mechanical motion
 - (b) Gradually accelerate and decelerate the movement of objects
 - (c) Change the color of animated symbols
 - (d) Resize symbols in the animation

C-5441

7.	In	frame-by-frame	animation,	what	does	each	frame
	rep	resent?					

- (a) A single pose or action in the sequence
- (b) A layer of background music
- (c) A static visual element
- (d) A change in character's color scheme
- 8. What is the primary purpose of the animation process?
 - (a) To create static illustrations
 - (b) To transform a series of images into a fluid and dynamic sequence of motion
 - (c) To adjust the color balance of an image
 - (d) To add text overlay to animation
- 9. What is a common task in audio editing for animation?
 - (a) Creating new visual elements
 - (b) Adjusting audio levels, removing noise, and synchronizing with animation
 - (c) Adding color to animated characters
 - (d) Adjusting frame rates of animation
- 10. What is the first step in integrating audio into an animation project?
 - (a) Editing the audio file
 - (b) Synchronizing the audio with the animation
 - (c) Creating and importing the audio into the animation application
 - (d) Recording additional sound effects

C-5441

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

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

11. (a) Explain the key anatomical features of birds that influence their design in character creation.

Or

- (b) Discuss the concept of flow lines in visualizing body forms.
- 12. (a) Describe the concepts of "follow through" and "overlapping action."

Or

- (b) Explain the principle of staging in animation.
- 13. (a) Describe how managing layers and symbol instances can impact the complexity of an animation project.

Or

- (b) Define the principle of "appeal" in animation.
- 14. (a) Describe the concept of mask animation and its application in creating visual effects.

Or

- (b) Explain the techniques used for background panning and zooming in animation.
- 15. (a) Describe the process of editing audio for an animation project.

Or

(b) Discuss the challenges and techniques involved in animating lip sync and acting for two characters interacting with each other.

C-5441

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

16. (a) Describe the basic anatomical structure of a quadruped animal and how it differs from that of a biped. How does understanding these differences aid in character design?

Or

- (b) Explain the standard proportions for a male character and how they are used to create a realistic or stylized figure. How can these proportions be adjusted for different effects?
- 17. (a) Discuss the importance of timing in animation. How does timing influence the perception of motion and weight in animated sequences? Illustrate with examples.

Or

- (b) Explain the principle of "stretch and squash" in animation. How does this principle contribute to the believability and expressiveness of animated characters? Provide examples.
- 18. (a) Explain the concept of secondary action in animation. How does adding secondary actions to primary movements enhance the overall realism and depth of a character?

Or

(b) Discuss the role of exaggeration in animation. How can exaggerating actions and expressions enhance the emotional impact and appeal of animated characters? Provide specific examples.

C-5441

19. (a) Describe the process of animating a four-leg walk cycle. How does the movement and timing differ from that of a two-legged walk cycle, and what considerations must be made to reflect realistic quadruped locomotion?

Or

- (b) Discuss the key components involved in animating a jump sequence. How do you create the anticipation, action, and landing phases of a jump animation to ensure fluid and believable motion? Provide specific techniques used in each phase.
- 20. (a) Describe the process of lip syncing in animation. What are the key components involved, and how can accurate lip syncing enhance the believability of animated characters?

Or

(b) Outline the steps required to prepare the animation timeline for integrating audio. How does proper timeline preparation affect the synchronization of audio with the animation?

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M.Sc. DEGREE EXAMINATION, APRIL 2025.

Second Semester

Multimedia

ADVANCED 3D DESIGN AND VISUALIZATION METHODS

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Which tool allows for the modification of the shape and position of an existing curve?
 - (a) Transform tool (b) Edit Points tool
 - (c) Trim tool (d) Loft tool
- 2. Which tool is commonly used to move an object along the X, Y, and Z axes in a 3D space?
 - (a) Select tool (b) Rotate tool
 - (c) Scale tool (d) Translate tool
- 3. What is the primary purpose of creating a surface fillet?
 - (a) To create a sharp edge between two surfaces
 - (b) To smooth the transition between two intersecting surfaces
 - (c) To delete an unwanted surface
 - (d) To mirror a surface

- 4. What is the purpose of the Append Polygon Tool?
 - (a) To delete a polygon
 - (b) To add polygons to an existing mesh
 - (c) To texture a polygon
 - (d) To merge two polygons into one
- 5. When texturing a robot model, which mapping technique ensures textures are accurately applied to the model's surface?
 - (a) Normal mapping
 - (b) Displacement mapping
 - (c) UV mapping
 - (d) Ambient occlusion mapping
- 6. What is the most important aspect to consider when texturing small tabletop props?
 - (a) The scale and resolution of the textures
 - (b) The color of the 3D model
 - (c) The number of polygons in the model
 - (d) The position of the lights in the scene
- 7. What is the primary function of joints in a rigging system?
 - (a) To create textures for the model
 - (b) To define points of articulation for animation
 - (c) To apply lighting to the model
 - (d) To generate realistic shadows

C-5442

	(c)	Parent Constrain	t		
	(d) Orient Constraint				
9.		at attribute of a see of light?	pot l	light controls the size of the	
	(a)	Penumbra Angle	(b)	Dropoff	
	(c)	Cone Angle	(d)	Intensity	
10.		ch common attribu inishes in intensity		fects how far light travels and	
	(a)	Decay Rate	(b)	Color	
	(c)	Intensity	(d)	Shadow Type	
		Par	rt B	$(5 \times 5 = 25)$	
	A	nswer all questions	s, cho	posing either (a) or (b).	
11.	(a)	Discuss the differ		types of transformations that bjects.	
			Or		
	(b)	navigating a 3I) sp	ry tools and techniques for eace? Explain how efficient e modeling process.	
			3	C-5442	

Which type of constraint is used to make one object's

rotation follow another object's rotation?

Point Constraint

Aim Constraint

8.

(a)

(b)

12. (a) Explain how the Append Polygon Tool is used to modify an existing mesh. What are the steps involved in appending polygons?

Or

- (b) Compare and contrast the use of polygons and NURBS in 3D modeling.
- 13. (a) Explain how you can optimize textures to maintain performance in a 3D scene.

Or

- (b) Discuss how different material properties (e.g., transparency, reflectivity, bumpiness) are controlled in Hyper Shade.
- 14. (a) Explain how the time slider is used in 3D animation software.

Or

- (b) Describe the wave principle in traditional animation.
- 15. (a) Describe the process of baking shadows in 3D rendering.

Or

(b) Compare depth map shadows and ray traced shadows in terms of quality and computational requirements.

C-5442

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

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

16. (a) Explain the features and functionalities of a typical curve editing tool in 3D modeling software. How do these tools assist in the precise editing of curves?

Or

- (b) Describe the process of adding points to a curve in a 3D modeling application. How does this operation affect the flexibility and accuracy of curve manipulation?
- 17. (a) Describe the function of the Polygon Smooth Tool. What impact does smoothing have on a mesh and when should it be used?

Or

- (b) Discuss the different types of Boolean operations in polygon modeling. How do union, difference and intersection operations affect the geometry of the meshes involved?
- 18. (a) Describe the importance of UV mapping in texturing tabletop props. What are some best practices for creating efficient and distortion-free UV maps?

Or

(b) Explain the challenges and solutions in texturing a large exterior scene. How do you manage texture resolution and detail across various elements of the scene?

C-5442

19. (a) Explain the concept of a primitive rig. How can primitive rigs be used to create basic animations or test character movements?

Or

- (b) Discuss the process of skinning in 3D modeling. What are the differences between rigid skinning and smooth skinning, and when should each be used?
- 20. (a) Describe the characteristics of point lights in 3D rendering. In what scenarios are point lights most effectively used?

Or

(b) Explain the key attributes of spot lights, including cone angle, penumbra angle, and drop-off. How do these attributes influence the lighting and mood of a scene?

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M.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Multimedia

EXPLAINER VIDEO PRODUCTION

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the primary purpose of motion graphics?
 - (a) Video editing
 - (b) Visual storytelling
 - (c) Audio enhancement
 - (d) Data analysis
- 2. What tool is used for composting techniques in motion graphics?
 - (a) Layer mask
- (b) Paint brush
- (c) Key frame editor (d)
- (d) Timeline panel
- 3. What is a key feature of transparency in graphics?
 - (a) Opacity
- (b) Hue
- (c) Saturation
- (d) Brightness
- 4. Which component is essential for creating animation presets?
 - (a) Color picker
- (b) Timeline
- (c) Key frames
- (d) Brush tool

5.	Wha	at is rotoscoping pri	maril	y used for?
	(a)	Color correlation	(b)	Animation
	(c)	Masking	(d)	Audio syncing
6.	Whi	ch tool assists in st	abiliz	ing footage?
	(a)	Keying	(b)	Tracking
	(c)	Rendering	(d)	Layering
7.	Wha	at is essential for ur	nders	tanding video formats?
	(a)	Resolution	(b)	Frame rate
	(c)	Aspects ratio	(d)	All of the above
8.	Whi	ch software feature	is us	ed to import audio files?
	(a)	Layer editor	(b)	Audio panel
	(c)	Timeline	(d)	File manager
9.	Wha	at is the purpose of	a par	ticle world in animation?
	(a)	Image editing		
	(b)	Audio enhanceme	nt	
	(c)	Dynamic visual ef	ffects.	
	(d)	Layer masking		
10.	Wha	at does the animatio	on cor	mposer primary assist with?
	(a)	Video rendering		
	(b)	Audio editing		
	(c)	Animation creation	n	
	(d)	Text formatting		
			2	C-5443

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

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

11. (a) Explain the process of importing footages and its significance in project workflow.

Or

- (b) Describe the role key frames in motion graphics.
- 12. (a) Discuss the importance of transparency and composting in creating motion graphics.

Or

- (b) Explain the use of markers in animation and how they enhance the workflow.
- 13. (a) Describe the process and tools used for 2D tracking in motion graphics.

Or

- (b) Explain the concept of masking and its application in animation.
- 14. (a) Discuss the process of creating a text and its significance in presentations.

Or

- (b) Explain the different video formats and their uses in motion graphics.
- 15. (a) Describe how particle effects enhance visual storytelling in animations.

Or

(b) Explain the use and importance of the rendering queue in finalizing projects.

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

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

16. (a) Discuss the interface navigation and its impact on efficient workflow in motion graphics.

Or

- (b) Explain the complete process of layer-based composting in creating animations.
- 17. (a) Analyze the role of effects and animation presets in enhancing graphic design.

Or

- (b) Explain how expressions and automation streamline the animation process.
- 18. (a) Discuss the importance of keying and 3D tracking in modern animation techniques.

Or

- (b) Explain the workflow of stabilizing footage and its importance in video production.
- 19. (a) Describe the steps involved in creating a corporate presentation using motion graphics.

Or

- (b) Analyze the impact of audio integration in enhancing motion graphic projects.
- 20. (a) Discuss the use of animation composers in creating complex animations.

Or

(b) Explain the role of color gradients and particle effects in dynamic motion graphics.

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M.Sc. DEGREE EXAMINATION, APRIL 2025.

Second Semester

Multimedia

VIDEO AND AUDIO EDITING

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the purpose of non-linear editing?
 - (a) Enhancing audio quality
 - (b) Rearranging clips without altering original files
 - (c) Adding special effects
 - (d) Synchronizing sound
- 2. Which view is used to preview the sequence in editing software?
 - (a) Source view (b) Timeline view
 - (c) Monitor view (d) Program view
- 3. What does the title safe zone ensure?
 - (a) Text is clear and legible
 - (b) Text fits within the visible screen area
 - (c) Text is animated smoothly
 - (d) Text has appropriate font size

4.	Wha	t is the function of	the tr	rim window?	
	(a)	Adding transition	\mathbf{s}		
	(b)	Cutting clips to de	esired	length	
	(c)	Applying color cor	rectio	on	
	(d)	Adjusting audio le	evels		
5.	Wha	t are keyframes us	ed for	in video editin	g?
	(a)	Transition effects			
	(b)	Synchronizing aud	dio		
	(c)	Controlling chang	es ove	er time	
	(d)	Organizing clips			
6.	Wha	t is a storyboard pr	rimari	ily used for?	
	(a)	Audio mixing	(b)	Planning visua	al sequences
	(c)	Exporting video	(d)	Editing titles	
7.	Wha	t is the function of	a vide	eo codec?	
	(a)	Enhancing video	resolu	tion	
	(b)	Compressing and	decon	npressing video	files
	(c)	Synchronizing aud	dio tra	acks	
	(d)	Adjusting video sp	oeed		
8.	Whi	ch effect is common	ly use	ed for echo in au	udio editing?
	(a)	Reverb	(b)	Delay	
	(c)	Pitch shift	(d)	Amplitude	
9.	Wha	t is the role of sam	ple ra	te in audio?	
	(a)	Determines file si	ze		
	(b)	Measures audio re	esolut	cion	
	(c)	Adjusts playback	speed	ļ	
	(d)	Defines number of	f char	nnels	
			2		C-5444

10. What is noise reduction used for in audio editing?
(a) Increasing volume
(b) Removing background sounds
(c) Enhancing bass
(d) Synchronizing tracks

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

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

11. (a) Describe the functions of the monitor window controls in editing software.

Or

- (b) Explain the process of editing clips into a sequence using non-destructive editing techniques.
- 12. (a) Discuss the importance of three-point editing in video production.

Or

- (b) Explain the use of transitions and how they enhance a video project.
- 13. (a) Describe how keyframes are used to apply effects over time in video editing.

Or

- (b) Explain the process of playing audio within a selected clip.
- 14. (a) Discuss the significance of customizing the rendering format for different projects.

Or

- (b) Explain the steps involved in exporting a video with different codecs.
- 15. (a) Describe how multiple soundtracks can be added and managed in an editing project.

Or

(b) Explain the importance of noise reduction and how it is achieved in audio editing.

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

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

16. (a) Discuss the differences between online editing and offline editing in video production.

Oı

- (b) Explain the role of time code in managing video clips.
- 17. (a) Analyze the process of trimming clips using slip and slide edits and their impact on storytelling.

Or

- (b) Explain the role of workspaces and how they enhance efficiency in editing projects.
- 18. (a) Discuss the application and control of standard effects in video editing.

Or

- (b) Explain how to change filter effects over time using keyframes.
- 19. (a) Describe the process of using the audio mixer window to balance audio levels.

Or

- (b) Analyze the importance of exporting settings in maintaining video quality.
- 20. (a) Discuss the various audio file formats and their uses in different projects.

Oı

(b) Explain how mixing voice and music can enhance a video project.

M.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Multimedia

MODELING AND TEXTURING

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the function of polygon Booleans in modeling?
 - (a) To animate models
 - (b) To combine or subtract shapes
 - (c) To apply textures
 - (d) To adjust lighting
- 2. Which method is used for creating symmetry in models?
 - (a) Boolean operations
 - (b) Mirror geometry
 - (c) Curve editing
 - (d) Extrusion

3.	What	t is the purpose of the retopology process?
	(a)	To smooth surfaces
	(b)	To create UV maps
	(c)	To optimize mesh topology for animation
	(d)	To apply textures
4.	Whic	h brush is used for adding fine details in sculpting?
	(a)	Clay brush
	(b)	Smooth brush
	(c)	Detail brush
	(d)	Alpha brush
5.	What	t is baking in texturing?
	(a)	Applying color directly to models
	(b)	Creating detailed lighting effects
	(c)	Converting high-resolution details into texture maps
	(d)	Generating animations
6.	What	t does Final Gather do in lighting?
	(a)	Increases render speed
	(b)	Calculates indirect light bounces
	(c)	Sharpens textures
	(d)	Enhances color saturation
		2 C-5445

	(b)	Area lights
	(c)	Volume lights
	(d)	Point lights
8.	Wha	t is the role of occlusion pass in rendering?
	(a)	To add textures
	(b)	To create reflections
	(c)	To enhance shadows and depth
	(d)	To adjust color balance
9.	Whie deta	ch pass is primarily used for capturing surface ils?
	(a)	Specular pass
	(b)	Diffuse pass
	(c)	Z-depth pass
	(d)	Shadow pass
10.	Wha	at is the function of mental ray in rendering?
	(a)	To create animations
	(b)	To enhance video playback
	(c)	To perform photorealistic rendering
	(d)	To apply textures
		3 C-5445

Which light type is ideal for casting realistic shadows?

7.

(a)

Spotlights

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

11. (a) Explain how to create and manipulate objects within a 3D workspace.

Or

- (b) Describe the process of applying materials and textures to a 3D model.
- 12. (a) Discuss the tools and techniques used in character sculpting for detail enhancement.

Or

- (b) Explain the differences between symmetric and asymmetric sculpting.
- 13. (a) Describe the process of unwrapping polygons for texture application.

Or

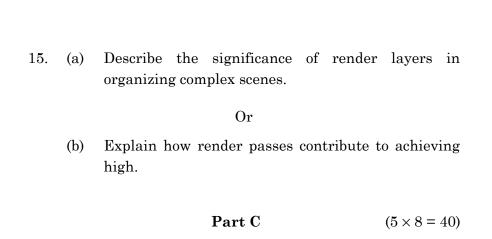
- (b) Explain the role of baking normal maps in 3D modeling.
- 14. (a) Discuss the various lighting types and their specific applications in 3D scenes.

Or

(b) Explain the importance of global illumination in realistic rendering.

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

16. (a) Analyze the techniques involved in creating complex polygonal models.

Or

- (b) Explain the role of topology in character modeling and animation.
- 17. (a) Discuss the tools and techniques used in character sculpting for games.

Or

- (b) Explain the process and importance of retopologizing a high-resolution model.
- 18. (a) Describe the workflow for creating and applying texture maps in a 3D application.

Or

(b) Explain the steps involved in photograph manipulation for texturing purposes.

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19. (a) Analyze the impact of direct and indirect lighting techniques on a 3D scene.

Or

- (b) Explain the use of SSS Shader in achieving realistic skin textures.
- 20. (a) Discuss the advantages and challenges of using different rendering engines.

Or

(b) Explain the importance of render passes in achieving a cinematic look.

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M.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Multimedia

ADVANCED RIGGING AND ANIMATION

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the purpose of adding custom attributes in rigging?
 - (a) To change colors
 - (b) To control animation layers
 - (c) To enhance rig flexibility
 - (d) To adjust sound effects
- 2. Which deformer is used to bend an object in rigging?
 - (a) Twist
- (b) Bend
- (c) Squash
- (d) Stretch
- 3. What is the function of a spline IK system?
 - (a) Controls texture mapping
 - (b) Adjusts lighting effects
 - (c) Facilitates smooth joint movement
 - (d) Enhances sound quality

4.	Which technique is used to mirror weights in character
	rigging?

- (a) Weight painting (b) Inverse kinematics
- (c) Symmetry tool (d) Animation layers
- 5. What does the principle of squash and stretch provide in animation?
 - (a) Lighting variation
 - (b) Textural contrast
 - (c) Dynamic movement
 - (d) Color depth
- 6. Which animation tool helps in separating motion into layers?
 - (a) Animation graph (b) Timeline editor
 - (c) Animation layers (d) Sound mixer
- 7. What is the primary focus of a character's walk cycle?
 - (a) Visual effects
 - (b) Lighting setup
 - (c) Rhythmic movement
 - (d) Sound design
- 8. What is the purpose of extreme poses in animation blocking?
 - (a) Add lighting effects
 - (b) Define key movements
 - (c) Enhance sound quality
 - (d) Adjust textures
- 9. What is the main benefit of using Mo-cap data in animation?
 - (a) Increased render speed
 - (b) Enhanced texturing
 - (c) Realistic movement capture
 - (d) Improved lighting

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10. Why is camera blocking crucial in animation production?
(a) Improves texture mapping
(b) Enhances sound clarity
(c) Establishes shot composition
(d) Controls lighting effects

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

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

11. (a) Discuss the role of deformers in creating dynamic animations and effects.

Or

- (b) Explain the process of analyzing a prop rig for complex animations.
- 12. (a) Describe the steps involved in constructing a character's skeleton system and its controls.

Or

- (b) Explain the techniques used in mirroring weights and finalizing character weights.
- 13. (a) Discuss the principles of animation that are essential for creating lifelike character movements.

 O_1

- (b) Explain the role of animation layers in organizing complex animations.
- 14. (a) Describe the key features of a character walk cycle and its animation techniques.

 O_1

- (b) Explain the process of refining facial animations for expressive characters.
- 15. (a) Discuss the application of Mo-cap data in creating realistic character animations.

Or

(b) Explain the importance of camera blocking in visual storytelling and animation.

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

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

16. (a) Analyze the integration of rigging tools and deformers in character setup for animation.

Or

- (b) Explain the use of set driven keys and custom attributes in enhancing rigging functionality.
- 17. (a) Discuss the challenges in creating a detailed skeleton system for character animation.

Or

- (b) Explain the importance of skinning and weight painting in achieving realistic movement.
- 18. (a) Describe the process of animating complex character actions using animation editors.

Or

- (b) Explain how the principles of animation contribute to creating natural-looking motion.
- 19. (a) Analyze the techniques used in character walk cycles and interaction with props.

Or

- (b) Explain the process of developing facial animations and expressive characters.
- 20. (a) Discuss the benefits and challenges of integrating Mo-cap data with traditional animation.

Or

(b) Explain the role of camera blocking in enhancing the cinematic quality of animation.

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M.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Multimedia

ADVANCED LIGHTING AND RENDERING

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the main purpose of a fill light?
 - (a) To add color
 - (b) To increase shadows
 - (c) To reduce shadows
 - (d) To highlight textures
- 2. Which type of light creates depth and separation from the background?
 - (a) Key light
 - (b) Fill light
 - (c) Back light
 - (d) Ambient light

4.	How	does attenuation influence a light's appearance?
	(a)	Changes color
	(b)	Alters texture
	(c)	Affects distance effect
	(d)	Modifies speed
5.	Wha	t is a key benefit of using three-point lighting?
	(a)	Reduces complexity
	(b)	Balances highlights and shadows
	(c)	Enhances textures
	(d)	Increases brightness
6.	Wha	t does anisotropic highlight refer to?
	(a)	Uniform reflection
	(b)	Directional reflection
	(c)	Diffused light
	(d)	Shadow gradient
	(d)	
	(d)	Shadow gradient $ 2 \hspace{1.5cm} \textbf{C-5447} $
	(d)	C 5447
	(d)	C 5447

What does shadow brightness affect in a scene?

Light intensity

 $Color\ temperature$

Shadow contrast

Texture detail

3.

(a)

(b)

(c)

(d)

7.	Wha	t role does color temperature play in lighting?
	(a)	Adjusts sound
	(b)	Alters mood
	(c)	Changes texture
	(d)	Modifies weight
8.	Whice light	ch lighting technique involves simulating indirect?
	(a)	Direct lighting
	(b)	Global illumination
	(c)	Raytracing
	(d)	Specular mapping
9.	Wha	t is photon mapping primarily used for?
	(a)	Texture enhancement
	(b)	Shadow reduction
	(c)	Light scattering
	(d)	Noise cancellation
10.	How	does a reflection pass contribute to a final render?
	(a)	Adds texture
	(b)	Captures light
	(c)	Isolates reflections
	(d)	Enhances color
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Part B $(5 \times 5 = 25)$

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

11. (a) Describe the importance of lighting properties in creating realistic scenes.

Or

- (b) Explain how shadows can be used to reveal different angles in a scene.
- 12. (a) Discuss the role of attenuation and intensity in determining light quality.

Or

- (b) Explain how different color temperatures can be used for creative effect in lighting.
- 13. (a) Describe how light animation can impact the mood and dynamic of a scene.

Or

- (b) Explain the significance of light qualities such as softness and hardness.
- 14. (a) Discuss the challenges and solutions for common exposure problems in lighting.

Or

(b) Explain the process of gamma correction and its impact on image quality.

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15. (a) Describe the benefits of rendering layers and passes in complex scene creation.
Or
(b) Explain how photon mapping and caustics enhance

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

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

the visual realism of a render.

16. (a) Analyze the role of lighting integration in production workflows and its challenges.

Or

- (b) Explain how shading models and specular color contribute to realistic rendering.
- 17. (a) Discuss the principles and techniques of achieving effective three-point lighting.

Or

- (b) Explain the importance of shadow manipulation in enhancing visual storytelling.
- 18. (a) Describe how light color and qualities influence the emotional tome of a scene.

Or

(b) Explain the role of color balance and temperature lighting design.

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19. (a) Analyze the impact of camera settings on lighting and overall scene composition.

Or

- (b) Explain the advantages of raytraced reflections in achieving visual realism.
- 20. (a) Discuss the significance of advanced rendering techniques in achieving detailed final images.

Or

(b) Explain the importance of using rendering passes for effective composting.

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M.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Multimedia

DIGITAL CINEMATOGRAPHY

(2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Which line is used to create a sense of depth in composition?
 - (a) Horizontal line (b) Vertical line
 - (c) Leading line (d) Zig Zag line
- 2. Which camera is typically used for action shots?
 - (a) DSLR
- (b) GoPro
- (c) RED
- (d) Alexa
- 3. What does field of view in a lens determine?
 - (a) Light intensity
 - (b) Depth of field
 - (c) Image area captured
 - (d) Shutter speed
- 4. What type of lens is best for landscape photography?
 - (a) Telephoto
- (b) Wide-angle
- (c) Macro
- (d) Prime

		ject?	,	35.11				
	(a)	Close-up	(b)	Medium shot				
	(c)	Long shot	(d)	Two shot				
6.	What is a crane shot used for?							
	(a)	Ground-level per	specti	ve				
	(b)	Aerial views						
	(c)	Eye-level shots						
	(d)	Static views						
7.		ich light in three-paration?	ooint	lighting provides background				
	(a)	Key light	(b)	Fill light				
	(c)	Back light	(d)	Side light				
8.	Wha	What is the purpose of using dimmers in lighting setups?						
	(a)	Increase brightness						
	(b)	Decrease contrast						
	(c)	Control light intensity						
	(d)	Change color						
9.	Wha	at is the primary us	se of a	matte box?				
	(a)	(a) Stabilize the camera						
	(b)	Filter light						
	(c)	Reduce lens flare	!					
	(d)	Support heavy le	nses					
10.	Which material is used to soften light in photography?							
	(a)	Satin cloth	(b)	Reflector				
	(c)	Diffuser	(d)	Skimmer				
				C-5448				
			2	1 1 5/1/8				

5.

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

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

11. (a) Explain the significance of composition techniques in digital cinematography.

Or

- (b) Discuss the role of storyboard and mood board in pre-production.
- 12. (a) Describe how camera aperture affects depth of field.

Or

- (b) Explain the impact of lens perspective on image composition.
- 13. (a) Discuss the importance of camera height and angles in shot composition.

Or

- (b) Explain the role of camera blocking in effective storytelling.
- 14. (a) Describe how lighting can be used to enhance visual storytelling.

Or

- (b) Discuss the different types of lighting equipment and their applications.
- 15. (a) Explain the functions of various camera accessories in a shoot.

Or

(b) Discuss the use of filters and their impact on image quality.

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

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

16. (a) Analyze how different framing techniques affect visual storytelling.

Or

- (b) Discuss the evolution of digital cinematography and its impact on flimmaking.
- 17. (a) Evaluate the criteria for selecting the appropriate lens for a project.

Or

- (b) Analyze the challenges of lens distortion in cinematography.
- 18. (a) Examine the role of camera shots and angles in conveying a narrative.

Or

- (b) Discuss the impact of camera movement on the audience's emotional response.
- 19. (a) Analyze the significance of lighting in creating mood and atmosphere.

Or

- (b) Discuss the creative use of lighting in different genres of film.
- 20. (a) Evaluate the importance of using camera accessories to enhance production quality.

Or

(b) Discuss how various filters alter the appearance and mood of a shot.

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