

<b>C-4614</b>
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<b>Sub. Code</b>
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<b>82813</b>
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**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**First Semester**

**Game Art and Design**

**FUNDAMENTALS OF GAME ART**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. What is the term used to describe strokes that are drawn quickly and freely, without constraint?
  - (a) Darts
  - (b) Hatching
  - (c) Free strokes
  - (d) Surface limits
  
2. In perspective drawing, which term refers to the imaginary line representing the viewer's eye level?
  - (a) Horizon line
  - (b) Station point
  - (c) Picture plane
  - (d) Vanishing point

3. Which of the following is a primary component of figure drawing basics?
- (a) Proportion and gesture
  - (b) Hue and saturation
  - (c) Value and contrast
  - (d) Color mixing techniques
4. What is the purpose of creating a grayscale in color theory?
- (a) To depict primary colors accurately
  - (b) To simplify complex color schemes
  - (c) To explore different color combinations
  - (d) To understand the variations in brightness and darkness
5. Which ancient civilization is renowned for its elaborate cave paintings in Ajanta and Ellora?
- (a) Ancient Greece      (b) Mesopotamia
  - (c) Indus Valley        (d) Ancient India
6. In perspective drawing, which type of perspective view involves the use of multiple vanishing points?
- (a) One-point perspective
  - (b) Two-point perspective
  - (c) Aerial perspective
  - (d) Linear perspective
7. What term describes the intensity or purity of a color?
- (a) Hue                      (b) Value
  - (c) Saturation              (d) Tertiary color

8. Which term refers to the brightness or darkness of a color?
- (a) Hue (b) Value  
(c) Saturation (d) Intensity
9. Which art movement emphasized emotion and personal expression over objective representation?
- (a) Renaissance (b) Neoclassicism  
(c) Expressionism (d) Rococo
10. What technique in figure drawing involves representing objects or figures as if they were receding into the distance?
- (a) Foreshortening  
(b) Quick sketches  
(c) Cylindrical forms  
(d) Overlapping balance

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the concept of free strokes in art and how they contribute to creating dynamic compositions.

Or

- (b) Describe the process of shading and lighting in art and its significance in creating depth and atmosphere.

12. (a) Discuss the differences between linear perspectives and aerial perspectives, providing examples of each.

Or

- (b) Explain the construction methods of one-point, two-point, and three-point perspective views in art.
13. (a) Analyze the importance of proportion and gesture in figure drawing, providing examples to support your explanation.

Or

- (b) Describe the technique of foreshortening in figure drawing and its effect on creating realistic representations.
14. (a) Define the RGB mode in color theory and discuss its practical applications in art.

Or

- (b) Explain the concept of value in color theory and its role in creating contrast and depth in artworks.
15. (a) Trace the development of art from the Paleolithic age to contemporary art movements, highlighting significant artistic styles and periods.

Or

- (b) Analyze the artistic techniques used in prehistoric cave paintings and their cultural significance.

**Part C**

(5 × 8 = 40)

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

16. (a) Explain the concept of free strokes in art and how they contribute to creating dynamic compositions.

Or

- (b) Describe the process of shading and lighting in art and its significance in creating depth and atmosphere.
17. (a) Discuss the differences between linear perspectives and aerial perspectives, providing examples of each.

Or

- (b) Explain the construction methods of one-point, two-point, and three-point perspective views in art.
18. (a) Analyze the importance of proportion and gesture in figure drawing, providing examples to support your explanation.

Or

- (b) Describe the technique of foreshortening in figure drawing and its effect on creating realistic representations.
19. (a) Define the RGB mode in color theory and discuss its practical applications in art.

Or

- (b) Explain the concept of value in color theory and its role in creating contrast and depth in artworks.

20. (a) Trace the development of art from the Paleolithic age to contemporary art movements, highlighting significant artistic styles and periods.

Or

- (b) Analyze the artistic techniques used in prehistoric cave paintings and their cultural significance.
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<b>C-4615</b>
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<b>Sub. Code</b>
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<b>82815/82915</b>
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**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**First Semester**

**Game Art and Design**

**INTRODUCTION TO VISUAL COMMUNICATION**

**(Common for B.Sc. Game Art and Design, Visual Effects)**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. Which of the following best describes the concept of universal understanding in visual communication?
  - (a) Communicating messages that are universally accepted across cultures
  - (b) Ensuring clarity and comprehension of visual messages for all audiences
  - (c) Conveying emotions effectively through visual elements
  - (d) Overcoming barriers of communication through visual aids
2. What are the two main types of communication discussed?
  - (a) Technical and pragmatic
  - (b) Verbal and non-verbal
  - (c) Universal and specific
  - (d) Emotional and rational

3. According to the communication model emphasizing the sender-message-channel-receiver framework
- (a) Lasswell model
  - (b) Schramm's circular model
  - (c) Two-step flow theory
  - (d) Hypodermic needle model
4. In visual communication, what do the levels of communication—technical, schematic, and pragmatic—refer to?
- (a) Different stages of message development
  - (b) Various methods of audience engagement
  - (c) Levels of complexity in visual design
  - (d) Types of visual aids used in communication
5. What is the primary focus of semiotics in visual communication?
- (a) Analyzing color psychology
  - (b) Understanding sign and symbol interpretation
  - (c) Exploring narrative representation
  - (d) Implementing design execution techniques
6. Which aspect of semiotics deals with the relationship between signs and their meanings?
- (a) Denotations            (b) Connotations
  - (c) Paradigmatic        (d) Syntagmatic



7. What is the main objective of strategic communication?
- (a) Shaping public opinion
  - (b) Enhancing media ethics
  - (c) Promoting cross-cultural communication
  - (d) Understanding communication theories
8. How does cross-cultural communication influence public opinion formation?
- (a) It fosters global perspectives on policy issues
  - (b) It emphasizes media effects on cultural values
  - (c) It promotes ethical communication practices
  - (d) It shapes attitudes and behaviors across diverse societies
9. According to which theory suggests that media messages have a direct and powerful influence on audiences?
- (a) Hypodermic needle model
  - (b) Two-step flow theory
  - (c) Uses and gratification model
  - (d) Gatekeeper theory
10. What aspect of mass media communication is discussed in relation to media and advertising?
- (a) Media systems
  - (b) Media effects
  - (c) Media culture
  - (d) Media business management

**Part B**

(5 × 5 = 25)

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

11. (a) Discuss about the enhanced communication skills.

Or

- (b) Analyze the whites gate keeper theory.

12. (a) Discuss about the Schramm's circular model.

Or

- (b) Explain the Lasswell model in detail, emphasizing its application and relevance in visual communication strategies.

13. (a) Discuss the significance of narrative representation in the semiotic landscape of language.

Or

- (b) Explore the role of color psychology in visual communication.

14. (a) Assess the impact of strategic communication on the formation of public opinion.

Or

- (b) Evaluate the ethical considerations involved in media communication practices.

15. (a) Analyze influence of mass media on audience behavior and perceptions.

Or

- (b) Discuss about the understanding media systems for mass media communication.

**Part C**

(5 × 8 = 40)

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

16. (a) Explain the concept of enhancing retention.

Or

- (b) Discuss the significance of non-verbal communication in conveying emotions and its impact on audience engagement.

17. (a) Compare and contrast two communication models, highlighting their key features and applications in visual communication.

Or

- (b) Explain the significance of the SMCR model in understanding the process of communication, citing relevant examples.

18. (a) Discuss about the lateral thinking.

Or

- (b) Discuss the role of thematic-visual thinking in communication.

19. (a) Analyze the impact of strategic communication on public opinion formation. Consider its role in shaping attitudes and behaviors.

Or

- (b) Evaluate the importance of media ethics in maintaining credibility and trust in communication processes, with reference to cross-cultural perspectives.

20. (a) Discuss the hypodermic needle model.

Or

(b) Explain the uses and gratification model in the context of mass media communication, highlighting its implications for media consumption patterns and audience engagement.

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**C-4616**

**Sub. Code**

**82823**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Second Semester**

**Game Art and Design**

**DESIGN STUDY**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. \_\_\_\_\_ is the primary purpose of design in human life.
  - (a) To create aesthetically pleasing objects
  - (b) To solve problems and improve functionality
  - (c) To replicate natural forms
  - (d) To limit creativity
2. \_\_\_\_\_ is a characteristic of a designer's mind.
  - (a) Rigid thinking
  - (b) Focus on cost-cutting
  - (c) Innovative and experimental approach
  - (d) Preference for traditional solutions

3. \_\_\_\_\_ principle of design involves the relationship between elements in terms of size and quantity.
- (a) Balance
  - (b) Proportion and Scale
  - (c) Contrast
  - (d) Emphasis
4. Pattern and repetition in design primarily serve to \_\_\_\_\_
- (a) Create chaos
  - (b) Ensure balance
  - (c) Establish rhythm
  - (d) Increase cost
5. The Color Wheel helps us understand \_\_\_\_\_
- (a) Typeface classifications
  - (b) Color harmonies and relationships
  - (c) Pattern repetition
  - (d) Digital image formats
6. In typography, 'leading' refers to \_\_\_\_\_
- (a) The spacing between letters
  - (b) The thickness of lines in a font
  - (c) The vertical spacing between lines of text
  - (d) The horizontal alignment of text

7. Vector graphics are composed of \_\_\_\_\_
- (a) Pixels
  - (b) Paths defined by points, curves, and angles
  - (c) Bitmaps
  - (d) Noise
8. Grid systems in design are used to \_\_\_\_\_
- (a) Add color to the design
  - (b) Organize and structure content
  - (c) Enhance image quality
  - (d) Create randomness in layout
9. Colors opposite each other on the color wheel are called \_\_\_\_\_
- (a) Analogous colors
  - (b) Complementary colors
  - (c) Monochromatic colors
  - (d) Triadic colors
10. Grid consistency in design ensures \_\_\_\_\_
- (a) Visual chaos
  - (b) Alignment and harmony
  - (c) Random element placement
  - (d) Minimal white space

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the significance of understanding design principles in creating effective solutions

Or

- (b) Discuss the differences between creative and stereotype solutions in design.

12. (a) How does the use of proportion and scale influence a design? Provide an example.

Or

- (b) Describe the importance of pattern and repetition in creating visual interest.

13. (a) What are color harmonies and why are they important in design?

Or

- (b) Explain the concept of color temperature and its effect on mood in a design.

14. (a) Describe the anatomy of a typeface and explain its significance in typography.

Or

- (b) What are the key considerations when selecting appropriate fonts for a project?



15. (a) Explain the process of image manipulation and its applications in design.

Or

- (b) Discuss the role of vector graphics in digital design and their advantages over raster graphics.

**Part C**

(5 × 8 = 40)

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

16. (a) Discuss the impact of design principles on the functionality and aesthetics of everyday objects.

Or

- (b) Evaluate the role of the target audience in shaping the design process and outcomes.

17. (a) Analyze the relationship between creative expression and contextual application in design.

Or

- (b) Explore the importance of proportion and scale in architectural design.

18. (a) Describe the practical applications of color theory in branding and marketing. Include examples of successful brands.

Or

- (b) Examine the psychological effects of color in interior design. How can color choices influence the mood of a space?

19. (a) Trace the history of typography and its evolution over the centuries. How has it influenced modern graphic design?

Or

- (b) Discuss the importance of grid systems in editorial design. How do they contribute to the readability and aesthetic of printed materials?
20. (a) Explain the concept of the golden mean and its application in design.

Or

- (b) Discuss the stages of the design process and the importance of each stage in achieving a successful design outcome.
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<b>C-4617</b>
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<b>Sub. Code</b>
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<b>82825</b>
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**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Second Semester**

**Game Art and Design**

**CRITICAL STUDIES FOR GAMES**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. \_\_\_\_\_ the rise of home computer video games.
  - (a) Mainframe grams
  - (b) Arcade games
  - (c) Bank vector games
  - (d) Electronic arts
  
2. \_\_\_\_\_ was a significant factor in the video game industry crash.
  - (a) The rise of arcade games
  - (b) A new generation of home video game systems
  - (c) Overproduction of games
  - (d) The influence-of interactive movies

3. \_\_\_\_\_ handheld video game system became popular in the 1990s.
- (a) Atari
  - (b) Game Boy
  - (c) Sega Genesis
  - (d) Sony PlayStation
4. Who is a well-known character from the game “Tomb Raider”?
- (a) Pac-Man
  - (b) Lara Croft
  - (c) Mario
  - (d) Sonic
5. \_\_\_\_\_ is a common feature of first-person shooting games.
- (a) Side-scrolling
  - (b) Third-person perspective
  - (c) First-person perspective
  - (d) Overhead view
6. \_\_\_\_\_ is known for its groundbreaking graphics and immersive sound.
- (a) Tetris
  - (b) Doom
  - (c) Zork
  - (d) Castle Wolfenstein
7. \_\_\_\_\_ is a major moral and ethical controversy in video games.
- (a) Game genres
  - (b) Video game ratings
  - (c) Graphics in video games
  - (d) Violence and content in games

8. \_\_\_\_\_ is a significant factor in selling ideas to the game industry.
- (a) Game market
  - (b) Hidden agenda
  - (c) Designer accountability
  - (d) Target audience
9. \_\_\_\_\_ is an example of intellectual property in video games.
- (a) Game mechanics
  - (b) Character design
  - (c) Level design
  - (d) All of the above
10. \_\_\_\_\_ is a crucial element in targeting a market for a video game.
- (a) Game genre
  - (b) Graphics quality
  - (c) Focus groups
  - (d) Sound design

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the influence of early video game systems on modern gaming technology.

Or

- (b) Discuss the significance of mainframe games and simulations in the history of video games.

12. (a) Describe the impact of handheld video game systems on the gaming industry in the 1990s.

Or

- (b) Compare and contrast the popularity of arcade games in the 1990s with modern video game consoles.

13. (a) Analyze the role of graphics and sound in the development of video game genres.

Or

- (b) Discuss the ethical implications of video game content and the importance of rating systems.

14. (a) Evaluate the pros and cons of the impact of video games on players.

Or

- (b) Explain the significance of target audience analysis in game development.

15. (a) Discuss the importance of intellectual property in the video game industry and how it affects game development.

Or

- (b) Analyze the process of creating sequels in video games and the factors that contribute to their success.

**Part C**

(5 × 8 = 40)

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

16. (a) Discuss the evolution of video games from mainframe games to modern home video game systems.

Or

- (b) Analyze the role of interactive movies in the evolution of video games. How have they influenced game design and player experience?

17. (a) Evaluate the impact of Sony Play Station on the video game industry. Discuss how it changed the landscape of gaming and its lasting legacy.

Or

- (b) Compare and contrast the development and impact of video games in Europe, Asia, and Australia.

18. (a) Discuss the controversies surrounding video games as objects of moral and ethical debate.

Or

- (b) Analyze the relationship between video games and other media.

19. (a) Examine the business aspects of game publishing and the process of selling ideas to the industry.

Or

- (b) Evaluate the impact of games on players, including both positive and negative aspects.

20. (a) Discuss the importance of intellectual property in the video game industry.

Or

- (b) Analyze the process of creating sequels in the video game industry.
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**C-4618**

**Sub. Code**

**82833**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Third Semester**

**Game art and Design**

**GAME PRODUCTION**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. \_\_\_\_\_ is a key element in successfully pitching your original game idea
  - (a) Detailed market analysis
  - (b) High production costs
  - (c) Complex storylines
  - (d) Minimal team collaboration
  
2. \_\_\_\_\_ is primarily responsible for the game's narrative and character development
  - (a) Game Programmer
  - (b) Game Designer
  - (c) Game Tester
  - (d) Game Producer

3. \_\_\_\_\_ is the typical structure of a game development team
- (a) Hierarchical
  - (b) Linear
  - (c) Circular
  - (d) Matrix
4. In a developer's team, \_\_\_\_\_ is responsible for the game's artistic elements
- (a) Game Designer
  - (b) Art Director
  - (c) Lead Programmer
  - (d) Quality Assurance Tester
5. \_\_\_\_\_ involves recognizing patterns and sequences
- (a) Logic
  - (b) Riddles
  - (c) Spatial Reasoning
  - (d) Pattern Recognition
6. \_\_\_\_\_ is a common characteristic of a well-designed puzzle
- (a) Unsolvable complexity
  - (b) Predictable outcomes
  - (c) Clear rules and objectives
  - (d) Random elements
7. \_\_\_\_\_ is a three-act play structure in interactive storytelling
- (a) Introduction, Conflict, Resolution
  - (b) Beginning, Middle, End
  - (c) Start, Development, Finish
  - (d) Setup, Confrontation, Resolution

8. \_\_\_\_\_ involves player decisions that lead to different outcomes
- (a) Linear stories
  - (b) Decision trees
  - (c) Parallel stories
  - (d) Expository stories
9. \_\_\_\_\_ is specifically designed to educate players on a particular subject
- (a) Casual Game
  - (b) Social Game
  - (c) Serious Game
  - (d) Art Game
10. What milestone marks the end of major feature additions in game development?
- (a) Alpha
  - (b) Beta
  - (c) Gold
  - (d) Post-release

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the significance of pitching your original ideas to the game industry.

Or

- (b) Discuss the various game development career choices available to new graduates.

12. (a) Describe the typical team structure in game development and the role of communication within the team.

Or

- (b) Analyze the differences between a developer's team and a publisher's team.
13. (a) Discuss the constraints that influence game design and how they impact puzzle creation.

Or

- (b) Explain the characteristics of an effective level design in relation to puzzle integration.
14. (a) Compare and contrast traditional stories and interactive stories in game design.

Or

- (b) Discuss the role of decision trees in creating engaging interactive narratives.
15. (a) Evaluate the importance of marketing, packaging, and releasing in the success of a game.

Or

- (b) Discuss the concept of serious games and their application as teaching tools.

**Part C**

(5 × 8 = 40)

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

16. (a) Discuss the impact of a well-crafted pitch on getting a job at a game publisher or developer.

Or

- (b) Analyze the role definitions for game designers and how these roles contribute to the overall success of a game project.
17. (a) Examine the process of applying for a job in game design and the essential skills required for success.

Or

- (b) Evaluate the importance of team building and team communication from a designer's perspective in game development.
18. (a) Explore the various types of puzzles used in games and how they cater to different player skills and preferences.

Or

- (b) Discuss the role of exploration and item use in level design and how they enhance the player's experience.
19. (a) Analyze the depth of storytelling in games and its impact on player engagement and immersion.

Or

- (b) Evaluate the importance of moral and immoral choices in interactive storytelling and their effects on the player's experience.

20. (a) Discuss the role of games as a form of art and how they reflect cultural and artistic expression.

Or

- (b) Examine the planning and execution required to achieve organic hits in the game industry.
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**C-4619**

**Sub. Code**

**82834**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Third Semester**

**Game Art and Design**

**DESIGN AND COMMUNICATION FOR GAME DESIGN**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. Importing 2D game assets into unity \_\_\_\_\_ file format is commonly used for images.  
  
(a) .obj                      (b) .jpg  
(c) .mp4                      (d) .wav
  
2. \_\_\_\_\_ is the primary purpose of the Sprite Editor in Unity.  
  
(a) To edit sound effects  
(b) To animate 3D models  
(c) To slice and edit sprite sheets  
(d) To create terrain

3. The most common location to display the player's health and score in a HUD is \_\_\_\_\_
- (a) Bottom-left corner
  - (b) Top-right corner
  - (c) Bottom-right corner
  - (d) Top-left corner
4. The example of a non-traditional game control is \_\_\_\_\_
- (a) Keyboard and mouse
  - (b) Gamepad
  - (c) Touchscreen
  - (d) Joystick
5. The primary purpose of lighting and shading in 2D art is \_\_\_\_\_
- (a) To add colors to the character
  - (b) To outline the character
  - (c) To create depth and dimension
  - (d) To simplify the design process
6. The principle of animation focuses on the visual appeal of the character is \_\_\_\_\_
- (a) Quash and Stretch
  - (b) Staging
  - (c) Timing
  - (d) Appeal



7. \_\_\_\_\_ a key consideration when designing sound for a game prototype.
- (a) Sound quality
  - (b) Sound file format
  - (c) How the sound supports game play and player experience
  - (d) Sound length
8. In game development, what is a “trigger”.
- (a) A graphical element in the game
  - (b) An event that occurs when a specific condition is met
  - (c) A sound effect that plays at random intervals
  - (d) A character’s movement speed
9. \_\_\_\_\_ is an important consideration when configuring building setting in Unity.
- (a) Game asset texture
  - (b) Background music tempo
  - (c) Character animations
  - (d) Target platform and resolution settings
10. \_\_\_\_\_ is a key step when publishing game assets.
- (a) Compressing and organizing assets for efficient use
  - (b) Increasing asset file sizes
  - (c) Disabling asset usage tracking
  - (d) Ignoring platform-specific requirements

**Part B**

(5 × 5 = 25)

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

11. (a) Describe the difference between vector and raster graphics in 2D game art.

Or

- (b) Describe the steps to import a 2D game asset into a game engine.

12. (a) Explain the purpose of a HUD (Heads-UP Display) in a game.

Or

- (b) Outline the importance of intuitive game controls.

13. (a) Describe the role of lighting in enhancing the visual depth of 2D characters.

Or

- (b) Define the principle of “appeal” in animation and explain how it contributes to character design.

14. (a) Explain how game engines facilitate the prototyping process.

Or

- (b) Describe the importance of events and actions in a game prototype.

15. (a) Explain how do reverb zones enhance the realism of game audio.

Or

- (b) Outline the key considerations when publishing game assets.

**Part C**

(5 × 8 = 40)

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

16. (a) Describe the process and best practices for importing and managing 2D game assets in a game engine.

Or

- (b) Analyze the function of a sprite editor in a game engine.

17. (a) Analyze the significance of screen location for presenting information in games.

Or

- (b) Identify common problems with game controls, such as input lag and inconsistent control schemes.

18. (a) Describe the concept of persistence of vision and its application in early animation devices like the thaumatrope.

Or

- (b) Discuss the function and significance of particle systems in game development.

19. (a) Discuss the importance of prototyping in game development.

Or

- (b) Analyze the importance of tiles and spaces in level design for game prototypes.

20. (a) Explain the importance of sound scripting in game development.

Or

- (b) Outline the key strategies for optimizing game performance.
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**C-4620**

**Sub. Code**

**82836**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Third Semester**

**Game Art and Design**

**3D DIGITAL ART FOR GAMES**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. \_\_\_\_\_ is the first stage of the 3D modeling process in Maya.
  - (a) Detailing
  - (b) Blocking
  - (c) Texturing
  - (d) Shaping
2. The common automated tool in Maya that can help speed up the modeling process is \_\_\_\_\_.
  - (a) UV Mapping Editor
  - (b) Boolean Operations
  - (c) Sculpt Geometry Tool
  - (d) Paint Effects

3. \_\_\_\_\_ static meshes commonly used for in game environment modeling.
- (a) Unchanging objects like buildings, trees and props
  - (b) Characters and animated objects
  - (c) Background music
  - (d) User interface elements
4. \_\_\_\_\_ modeling technique is crucial for creating animated meshes.
- (a) NURBS modeling
  - (b) Subdivision surface modeling
  - (c) Boolean operations
  - (d) Texture painting
5. The good topology important in vehicle modeling is \_\_\_\_\_
- (a) To increase the file size
  - (b) To simplify the unwrapping process
  - (c) To add more colors to the vehicle
  - (d) To ensure smooth deformation and efficient rendering
6. The purpose of assigning basic color maps in vehicle modeling is \_\_\_\_\_
- (a) To animate the vehicle
  - (b) To provide a basic visual representation of the vehicle's colors
  - (c) To rig the vehicle
  - (d) To increase polygon count

7. The purpose of Hyper shade in Maya is \_\_\_\_\_
- (a) To model 3D objects
  - (b) To create and edit shaders and materials
  - (c) To animate characters
  - (d) To render scenes
8. The advantage of creating handmade texture effects is \_\_\_\_\_
- (a) Lower file size
  - (b) Increased rendering speed
  - (c) Unique and stylized appearances
  - (d) Automatic lighting adjustments
9. In Unity, the purpose of the Hierarchy panel is \_\_\_\_\_
- (a) To edit shaders and materials
  - (b) To display and organize all the game objects in the current scene
  - (c) To adjust the project's audio settings
  - (d) To render the game scene
10. The understanding size and scale important in 3D game design is \_\_\_\_\_
- (a) To maintain a proper proportion in the game world
  - (b) To create game menus
  - (c) To ensure textures load properly
  - (d) To optimize the game's sound effects

**Part B**

(5 × 5 = 25)

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

11. (a) Describe how automated tools streamline the modeling process and what are their limitations.

Or

- (b) Explain the significance of uniform span flow in polygonal modeling.

12. (a) Discuss the importance of core modeling techniques.

Or

- (b) Explain normal maps, and how do they affect the appearance of one-sided objects in 3D modeling.

13. (a) Analyze considerations are important when texturing and applying materials to a vehicle model.

Or

- (b) Explain the process of assigning basic color maps to a vehicle's body mesh.

14. (a) Discuss the texture pipeline in 3D modeling, and what are its main stages.

Or

- (b) Outline the importance of generating essential maps like diffuse and bump in 3D texturing.



15. (a) Summarize the use and importance of the inspector panel in a game engine.

Or

- (b) Explain how size and scale effect in 3D game world design.

**Part C**

(5 × 8 = 40)

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

16. (a) Compare and contrast modeling requirements for animation versus game objects in Maya.

Or

- (b) Discuss advanced techniques in Maya used to achieve complex shapes in modeling.

17. (a) Describe the kit bashing in the context of game art, and how are static meshes used in this technique.

Or

- (b) Explain the concept of normal's in 3D modeling and their importance.

18. (a) Discuss the significance of correct proportions and layout in vehicle modeling for games.

Or

- (b) Outline the key steps and considerations in unwrapping a vehicle model for texturing.

19. (a) Discuss the creation and application of handmade texture effects in 3D modeling.

Or

- (b) Describe shader development in Hyper Shade contribute to the realism of a 3D model.
20. (a) Compare the key differences in terms of development and gameplay experience in 2D and 3D game design.

Or

- (b) Explain the function and significance of the project panel, hierarchy project and inspector panel in a game engine's interface.
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**C-4621**

**Sub. Code**

**82843**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Fourth Semester**

**Game Art and Design**

**PROCEDURAL MODELING FOR GAMES**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Section A**

(10 × 1 = 10)

Answer **all** questions.

1. SideFx Houdini primarily known for in the realm of 3D modeling and animation is called as \_\_\_\_\_.
  - (a) 2D animation
  - (b) Procedural content creation
  - (c) Texturing
  - (d) Game physics simulation
2. Advantage of using proceduralism for adaptive content creation in games is \_\_\_\_\_.
  - (a) Limited customization options
  - (b) Increased development time
  - (c) Dynamic and responsive game play experiences
  - (d) Less interactive game play

3. \_\_\_\_\_ panel in Houdini's interface is primarily used to create and manipulate 3D geometry.
- (a) Scene View            (b) Parameters Pane
  - (c) Network Editor    (d) Render View
4. The recommended practice for organizing complex projects in Houdini is \_\_\_\_\_.
- (a) Use a single node network for all elements
  - (b) Use multiple networks
  - (c) Save each node in separate files
  - (d) Avoid using labels and colors
5. The first step in setting up a project for bridge generation in Houdini is \_\_\_\_\_.
- (a) Creating terrain
  - (b) Animating the bridge
  - (c) Importing textures
  - (d) Setting up the project directory
6. \_\_\_\_\_ Houdini node allows you to create multiple instances of bridge segments based on defined parameters.
- (a) Transform node
  - (b) Copy to Points node
  - (c) Poly Extrude node
  - (d) Merge node

7. The first step in converting a procedural bridge tool into a Digital Asset in Houdini is \_\_\_\_\_.
- (a) Save the project file
  - (b) Create a new scene
  - (c) Select the network of nodes
  - (d) Render the scene
8. \_\_\_\_\_ file format is commonly used to export Houdini Digital Assets for use in game engines.
- (a) .obj
  - (b) .fbx
  - (c) .hda
  - (d) .jpeg
9. \_\_\_\_\_ plugin is commonly used to import Houdini Digital Assets into Unity.
- (a) Houdini Engine
  - (b) Unity Importer
  - (c) FBX Exporter
  - (d) Shader Graph
10. \_\_\_\_\_ a common method for optimizing procedural assets for real-time performance.
- (a) Increasing the texture resolution
  - (b) Reducing the polygon count
  - (c) Adding more light sources
  - (d) Increasing the number of procedural parameters

**Section B**

(5 × 5 = 25)

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

11. (a) Describe the proceduralism in 3D modeling.

Or

- (b) Summarize the ways does proceduralism contribute to the flexibility and creativity of game designers.

12. (a) Describe the main components of the Houdini interface.

Or

- (b) Explain how the network editor and the parameter pane work together in Houdini.

13. (a) Describe the process of creating a procedural bridge-building tool in Houdini.

Or

- (b) Explain the importance of parameterization in procedural bridge generation.

14. (a) Discuss the concept of digital assets in Houdini.

Or

- (b) Describe the process of updating and versioning a Houdini digital asset.

15. (a) Explain how import Houdini digital assets into game engines like Unity or Unreal Engine.

Or

- (b) Outline the techniques can be used to improve Houdini for real-time performance.

**Section C**

(5 × 8 = 40)

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

16. (a) Discuss the concept of proceduralism in 3D modeling and how it contrasts with traditional modeling methods.

Or

- (b) Analyze the challenges and limitations of proceduralism in 3D modeling and game design.
17. (a) Compare and contrast parameter-driven modeling with traditional modeling methods.

Or

- (b) Discuss the integration of Houdini's procedural workflows with other 3D software and game engines.
18. (a) Outline the steps involved in setting up a project in Houdini for generating procedural bridges.

Or

- (b) Explain the methods and techniques used to test and adjust variations of procedurally generated bridges in Houdini.
19. (a) Describe the process of converting a procedural bridge-building tool into a digital asset in Houdini.

Or

- (b) Describe the process of updating and versioning a Houdini digital asset.

20. (a) Discuss the importance of optimizing procedural assets from Houdini for real-time performance in game engines.

Or

- (b) Explain the workflow for implementing procedural assets from Houdini into game levels within a game engine.
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<b>C-4622</b>
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<b>Sub. Code</b>
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<b>82844</b>
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**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Fourth Semester**

**Game Art and Design**

**LEVEL DESIGN FOR GAME**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions..

1. In level design, what does “top view planning” help achieve?
  - (a) Improved texture quality
  - (b) Better navigation
  - (c) Enhanced sound effects
  - (d) Faster loading times
2. Which perspective is crucial for isometric art design?
  - (a) Linear perspective
  - (b) Aerial perspective
  - (c) Two-point perspective
  - (d) None of the above
3. What is a key tool used for sprite design in 2D level art?
  - (a) Blender
  - (b) Photoshop
  - (c) Maya
  - (d) Illustrator

4. Which is an essential aspect of 2D landscape painting?  
(a) Texture mapping (b) Pixel art  
(c) Grid layout (d) Dynamic lighting
5. In 3D multiplayer level design, what is the purpose of play testing?  
(a) To finalize the storyline  
(b) To identify bugs and issues  
(c) To improve color balance  
(d) To reduce loading time
6. What tool is introduced for 3D level design?  
(a) Hammer/Radiant (b) Unity  
(c) Unreal Engine (d) Sketch Up
7. Which concept is important in 3D single player level design?  
(a) Grid mapping (b) Brush concepts  
(c) Sprite animation (d) Sound editing
8. What does the scale factor influence in 3D design?  
(a) Color contrast (b) Object size  
(c) Texture resolution (d) Sound depth
9. What is a critical component of sandbox terrain creation?  
(a) Shader mapping (b) Height map  
(c) Layer blending (d) Sound integration
10. In terrain design, what does setting the time affect?  
(a) Texture quality (b) Lighting conditions  
(c) Object placement (d) Sound effects

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the process of level ideation and its importance in game design.

Or

- (b) Discuss the role of perspective in enhancing level design aesthetics.

12. (a) Describe the use of pixel ratios in sprite animation.

Or

- (b) Explain the differences between 2D and 3D level design principles.

13. (a) How does play testing improve 3D multiplayer level design?

Or

- (b) What are the core components to consider in 3D multiplayer design?

14. (a) Discuss the significance of texture and lighting in 3D single player design.

Or

- (b) Explain the process of adding static meshes in level mapping.

15. (a) Describe how terrain textures impact the realism in sandbox design.

Or

- (b) Explain the method of integrating flora and vegetation in sandbox terrain.

**Part C**

(5 × 8 = 40)

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

16. (a) Discuss in detail the steps involved in creating a top-view level plan and its impact on gameplay.

Or

- (b) Analyze the role of camera and focal view in level design and how they influence player experience.

17. (a) Explain the process and techniques of designing sprites using Photoshop for a 2D platform game.

Or

- (b) Evaluate the principles of maze design and its influence on player engagement in 2D games.

18. (a) Analyze the importance of identifying core game components in 3D multiplayer design.

Or

- (b) Discuss the play testing phase and its importance in finalizing 3D game levels.

19. (a) Explore the concept of brush techniques and their application in creating detailed 3D single player levels.

Or

- (b) Explain how lighting and texture are utilized to enhance the atmosphere in 3D game design.

20. (a) Discuss the challenges and solutions in creating realistic sandbox terrain environments.

Or

- (b) Evaluate the impact of atmospheric elements on player immersion in sandbox games.

**C-4623**

**Sub. Code**

**82846**

**B.Sc. DEGREE EXAMINATION, APRIL 2025**

**Fourth Semester**

**Game Art and Design**

**3D CHARACTER DESIGN FOR GAME**

**(2023 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions.

1. What is the primary goal of character topology?
  - (a) Texture enhancement
  - (b) Proper animation
  - (c) Efficient rendering
  - (d) Improved lighting
2. Which technique is used to create a character's face mesh?
  - (a) Extrusion
  - (b) Retopology
  - (c) Sculpting
  - (d) Baking
3. What is the purpose of unwrapping in texturing?
  - (a) To create animations
  - (b) To apply 3D textures
  - (c) To simplify modeling
  - (d) To allocate materials

4. Which tool is essential for character sculpting?
  - (a) Zmodeler
  - (b) Photoshop
  - (c) Blender
  - (d) Dynamesh
5. What does Dynamesh help achieve in sculpting?
  - (a) Color correction
  - (b) Texture mapping
  - (c) Mesh refinement
  - (d) Polygon reduction
6. Which is a feature of 3D sculpting software?
  - (a) Polygon reduction
  - (b) Texture painting
  - (c) Map baking
  - (d) Rigging
7. What is PBR in texturing?
  - (a) Physics-Based Rendering
  - (b) Polygon-Based Rendering
  - (c) Particle-Based Rendering
  - (d) Pixel-Based Rendering
8. Which technique is used for map baking in PBR?
  - (a) Lighting adjustment
  - (b) Surface detailing
  - (c) Normal map generation
  - (d) Rigging setup
9. What is the first step in character rigging?
  - (a) Texture application
  - (b) Primitive rig creation
  - (c) Animation cycle
  - (d) Scripting

10. Why are animation cycles important?
- (a) For texturing accuracy
  - (b) For seamless gameplay
  - (c) For sound integration
  - (d) For lighting effects

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the process of building a character body mesh.
- Or
- (b) Discuss the importance of character proportion and layout in game design.
12. (a) Describe the steps involved in texturing character specular maps.
- Or
- (b) Explain the role of sculpting brushes in character detailing.
13. (a) What are the benefits of using Dynamesh in 3D sculpting?
- Or
- (b) Discuss the significance of Retopology in high poly model sculpting.
14. (a) Explain the principles of PBR texturing techniques.
- Or
- (b) Discuss the challenges of importing high and low poly models for texturing
15. (a) Describe the process of basic rigging for game characters.
- Or
- (b) Explain the importance of animation cycles in game engines.

**Part C**

(5 × 8 = 40)

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

16. (a) Discuss the entire workflow of creating a character from modeling to topology.

Or

- (b) Analyze the techniques for building a profile of the character shape, including hair and face mesh.

17. (a) Evaluate the role of unwrapping and texturing in bringing characters to life.

Or

- (b) Discuss the introduction and application of sculpting tools in modern game design.

18. (a) Explore the features of advanced 3D sculpting software and their impact on game design.

Or

- (b) Analyze the process and challenges of map baking in high poly model Sculpting.

19. (a) Discuss the significance of PBR in achieving realistic textures for games.

Or

- (b) Evaluate advanced map baking techniques and their importance in game development.

20. (a) Analyze the work flow from rigging to animation in game character creation.

Or

- (b) Discuss the integration of advanced rigging techniques and their impact on animation quality.



<b>C-4624</b>
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<b>Sub. Code</b>
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<b>82832</b>
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**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Third Semester**

**Game Arts and Design**

**3D DIGITAL ART FOR GAMES**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. What is Maya modeling?
2. Define Productive modeling.
3. What are edge loops?
4. What is poly model?
5. Define topology.
6. Define texture in a model.
7. Define tabletop game industry.
8. What are handmade texture?
9. What is Hyper shading?
10. What is sky box?

**Part B**

(5 × 5 = 25)

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

11. (a) List and explain various ideas in productive game modeling.

Or

- (b) Explain in brief advantages of sculpt modelling.

12. (a) Explain gaming environment modeling.

Or

- (b) Discuss about level of detailing.

13. (a) Illustrate the process of assigning color map.

Or

- (b) Discuss on the role of PBR in creating a realistic look.

14. (a) Illustrate the process of mapping a 2d texture in a 3d plain.

Or

- (b) List and explain the selling ideas to gaming industry.

15. (a) List and explain impacts of using 3D gaming.

Or

- (b) Discuss on various gaming engine.

**Part C**

(3 × 10 = 30)

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

16. (a) Differentiate Modeling for animation and gaming objects.

Or

- (b) Discuss on the theory of LOD.

17. (a) Discuss on types of material and texturing.

Or

- (b) Elaborate the process of generating essential maps.

18. (a) Discuss on PBR (Physically-Based Rendering).

Or

- (b) Discuss on challenges understanding size and scale in modeling.

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**C-4625**

**Sub. Code**

**82833**

**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Third Semester**

**Game Arts and Design**

**DESIGN AND COMMUNICATION FOR GAME DESIGN**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. What is sprite editor?
2. What is a 2D pixel art?
3. Define GUI.
4. Distinguish between UI design and UX design
5. What is Thaumatrope?
6. What is the importance of anatomy and proportions in 2D art form?
7. Define Prototyping
8. List few importance of prototyping.
9. What are reverb zones?
10. What is a character profiling?

**Part B**

(5 × 5 = 25)

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

11. (a) Write down the steps in creating 2D object.

Or

- (b) How to import a 2D character sprite sheet and use in a Game object in Unity.

12. (a) How to improve the look and feel of a user interface? Describe with appropriate menu, game controls etc.,

Or

- (b) How to create a main menu in unreal engines?

13. (a) How to make color switch replica in Unity?

Or

- (b) What are the steps in fixing the proportions and anatomy of your favorite character.

14. (a) What is an Interactive Space? Explain with example

Or

- (b) Explain an abstract art.

15. (a) How to write sound effects?

Or

- (b) What are the features of building settings?

**Part C**

(3 × 10 = 30)

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

16. (a) Explain in detail the importance of brightness and shadow for character emotion with appropriate example.

Or

- (b) Explain the Principles of animation.

17. (a) Explain in detail the importance of prototyping.

Or

- (b) What is particle system? Explain its uses and effects.

18. (a) Design a GUI for any game of your choice with appropriate menu and game controls.

Or

- (b) Create a 2D game object.
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**C-4626**

**Sub. Code**

**82834**

**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Third Semester**

**Game Arts and Design**

**GAME PRODUCTION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Define Communication.
2. What are Pitching ideas?
3. What is meant by Pattern recognition?
4. Define Puzzle design.
5. What does Alpha milestone mean?
6. What is Interactive story telling?
7. Expand CGI.
8. What is a Mesh filter?
9. What are called as Social games?
10. What is a Moral story mean in game production?

**Part B**

(5 × 5 = 25)

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

11. (a) What are the techniques to sell ideas to the game industry?

Or

- (b) Outline the languages used for game scripts.

12. (a) Elucidate the ways in which you will build a team for developing a game.

Or

- (b) Distinguish between level design and puzzle design.

13. (a) What are the various types of puzzle?

Or

- (b) Determine the constraints of game designing.

14. (a) Elaborate on storytelling and the types of stories.

Or

- (b) Discuss the need of adding humour and fun in storytelling.

15. (a) List out the different types of special games.

Or

- (b) Compile the techniques used for marketing a game.



**Part C**

(3 × 10 = 30)

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

16. (a) Discuss about the career options available in gaming development.

Or

- (b) Explain Game window.

17. (a) Differentiate between traditional stories and personal experience stories.

Or

- (b) Elaborate the three act plot structure.

18. (a) Write a note on the importance of games as a teaching tool.

Or

- (b) Discuss the process of marketing, packaging games to the audience.

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**C-4627**

**Sub. Code**

**82842**

**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Fourth Semester**

**Game Art and Design**

**LEVEL DESIGN FOR GAME**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. What is level design?
2. What should be the ideal duration of a game level?
3. What is sprite animation?
4. Write about pixel ratio.
5. What is view plan?
6. Write about play test.
7. What is room?
8. Write about triggers.
9. What is vegetation?
10. Name three ways that terrain can be fun.

**Part B**

(5 × 5 = 25)

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

11. (a) Write about level ideation.

Or

- (b) Explain colouring perspective.

12. (a) Explain about level ideation.

Or

- (b) Differentiate 2D and 3D level design.

13. (a) Describe the process of identifying game play.

Or

- (b) Explain play testing and finalising.

14. (a) Explain process of building level.

Or

- (b) Describe the brush concepts.

15. (a) What are the things to be considered while texturing terrain? Explain.

Or

- (b) Explain sand box.

**Part C**

(3 × 10 = 30)

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

16. (a) Explain the fundamentals of game design level layouts.

Or

- (b) Explain principles and segments.

17. (a) Write about top view plan.

Or

- (b) Describe the process of identifying core game components.

18. (a) Discuss about 2D platform design.

Or

- (b) Describe in detail about Terrain and Strategy.

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**C-4628**

**Sub. Code**

**82843**

**B.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Fourth Semester**

**Game Arts and Design**

**3D CHARACTER DESIGN FOR GAME**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Mention two characters of game topology
2. What are low poly models?
3. What are the steps in creating hands and feet?
4. How to choose colors for mapping?
5. What is unwrapping and texturing?
6. How to do character unwrapping?
7. What is sculpting?
8. Define alpha textures.
9. What is Retopology?
10. What is Dynamesh?

**Part B**

(5 × 5 = 25)

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

11. (a) Explain the proportion and layout in character modeling.

Or

- (b) Explain the steps in building character body mesh.

12. (a) Describe the sculpting tools used in character unwrapping.

Or

- (b) Explain character detailing.

13. (a) Explain transposing in Virtual Reality with appropriate examples.

Or

- (b) Explain Map baking techniques for 3D gaming.

14. (a) What should you think about when creating a game character?

Or

- (b) Explain the importance of lights in PBR.

15. (a) What are basic and advanced rigging techniques? Explain.

Or

- (b) What are steps involved in game animation?

**Part C**

(3 × 10 = 30)

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

16. (a) Illustrate a video game character.

Or

- (b) What are the steps in creating a 3D character and high poly model sculpting?

17. (a) Explain the principles for game animation.

Or

- (b) Write about 3D sculpting softwares and user interface.

18. (a) Detail the Sculpting tools.

Or

- (b) Create a story board for 3D animation.

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