Sub. Code

82842

## **B.Sc. DEGREE EXAMINATION, APRIL 2024**

### **Fourth Semester**

### Game Art and Design

#### LEVEL DESIGN FOR GAME

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. What is isometric art?
- 2. Who is 2D platform design?
- 3. What is BG design?
- 4. What is maze?
- 5. What is detailing?
- 6. Write about blocking.
- 7. Define scale factor.
- 8. What are static meshes?
- 9. Write about height map.
- 10. Write about flora.

Part B

 $(5 \times 5 = 25)$ 

### Answer **all** questions.

11. (a) Explain the level ideation.

Or

- (b) Write about perspective for better level design.
- 12. (a) Write about sprite animation.

Or

- (b) Describe principles and segments.
- 13. (a) Write about play testing.

Or

- (b) Describe the process of identifying core game components.
- 14. (a) Write about level mapping.

Or

- (b) Explain light setup.
- 15. (a) Write about Heightmaps.

Or

(b) Describe in detail about Terrain and Strategy.

2

C-1630

**Part C**  $(3 \times 10 = 30)$ 

# Answer all questions.

16. (a) Explain in detail about the Level Design Process.

Or

- (b) Explain about level ideation.
- 17. (a) Describe 2D landscape painting.

Or

- (b) Explain principles and segments.
- 18. (a) Explain various types of lights used in game.

Or

(b) Describe Genre-Specific Level Design Principles.

Sub. Code

82843

### **B.Sc. DEGREE EXAMINATION, APRIL 2024**

### **Fourth Semester**

### Game Art and Design

#### 3D CHARACTER DESIGN FOR GAME

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Define the character.
- 2. What is Character Modeling?
- 3. What is texturing?
- 4. What is character unwrapping?
- 5. What is Zmodeler?
- 6. Write about dynamesh.
- 7. Define painter.
- 8. What is PBR?
- 9. Write about sculpting bruches.
- 10. Write about advance rigging.

Part B

 $(5 \times 5 = 25)$ 

|     |     | `  |
|-----|-----|--|
|     |     | Answer all questions.                    |
| 11. | (a) | Write about handling hair and face mesh. |
|     |     | $\operatorname{Or}$                      |
|     | (b) | Write about Character mood.              |
| 12. | (a) | Write about Shape Theory.                |
|     |     | $\operatorname{Or}$                      |
|     | (b) | Describe Flocking.                       |

Write about Design Strategy. 13.

Or

What is 3D Digital Sculpting? (b)

What is map baking? 14. (a)

Or

What are Character Archetypes? (b)

Write about basic rigging. 15. (a)

Or

Explain the process of choosing Design theme. (b)

2

C-1631

**Part C**  $(3 \times 10 = 30)$ 

# Answer all questions.

16. (a) Explain in detail 3D character and high poly model.

Or

- (b) Explain about Sculpting techniques.
- 17. (a) Describe advance brush technique.

Or

- (b) Explain animation cycles for engines.
- 18. (a) Explain retopology.

Or

(b) Describe baking detail to low poly.

Sub. Code 82813

### **B.Sc. DEGREE EXAMINATION, APRIL 2024.**

#### First Semester

#### Game Art and Design

#### FUNDAMENTALS OF GAME ART

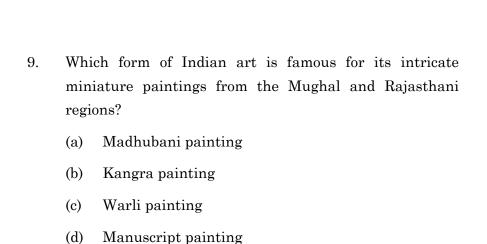
#### (2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the term for the boundaries or edges of surfaces in a drawing or painting?
  - (a) Surface limits
  - (b) Geometric structure
  - (c) Superimposed levels
  - (d) Progressive method
- 2. Which element of shading and lighting focuses on the gradual transition between light and shadow?
  - (a) Free strokes
- (b) Dots
- (c) Hatching
- (d) Shading and lighting
- 3. What is the term for line at the viewer's eye level in a perspective drawing?
  - (a) Horizon line/eye level
  - (b) Station point
  - (c) Picture plane
  - (d) Vanishing point

| 4. |   | What is the name for the point where all parallel lines seem to converge in a perspective drawing? |         |                                     |  |
|----|---|--|---------|-------------------------------------|--|
|    | (a)   | Station point  | (b)     | Picture plane                       |  |
|    | (c)   | Vanishing point  | (d)     | -                                   |  |
| 5. | What is the term for the techniques of making a figure appear shorter dur to the angle of view? |  |         |                                     |  |
|    | (a)   | Balance  | (b)     | Overlapping                         |  |
|    | (c)   | Stick figure   | (d)     | Foreshortening                      |  |
| 6. |   | at is the term for the   |         | sic skeletal structure used as ing? |  |
|    | (a)   | Quick sketches   | (b)     | Stick figure                        |  |
|    | (c)   | Balance  | (d)     | Study from live figure              |  |
| 7. |   | ch type of colors ar<br>ther?  | e crea  | ated by mixing primary colors       |  |
|    | (a)   | Primary colors   | (b)     | Secondary colors                    |  |
|    | (c)   | Tertiary colors  | (d)     | Greyscale                           |  |
| 8. | In co   | olor theory, what do   | oes "c  | olor psychology" refer to?          |  |
|    | (a)   | The psychological emotions and beh   |         |                                     |  |
|    | (b)   | The study of color   | mixi    | ng                                  |  |
|    | (c)   | The history of colo  | or in a | art                                 |  |
|    | (d)   | The use of color in  | n mar   | keting                              |  |
|    |   |  | 2       | C-2366                              |  |
|    |   |  |         |                                     |  |
|    |   |  |         |                                     |  |



- 10. Which art movement is associated with the rejection of conventional artistic norms and the embrace of irrationality and absurdity?
  - (a) Classicism
  - (b) Expressionism
  - (c) Impressionism
  - (d) Neoclassicism

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

### Answer all questions.

11. (a) What are the different techniques for creating surface and areas in art, and how do they differ from one another?

Or

(b) How does the use of shading and lighting contribute to the progressive method in art?

C - 2366

12. (a) Define linear perspective and aerial perspective in art. How do they differ, and what are their respective uses?

Or

- (b) Compare and contrast one-point perspective, twopoint perspective, and three-point perspective in art.
- 13. (a) Describe the concept of proportion and gesture in figure drawing and their significance in creating realistic figures.

Or

- (b) How can artists simplify body parts into 2D shapes to aid in figure construction?
- 14. (a) What is the RYB color mode, and how does it differ from other color modes like RGB and CMYK?

Or

- (b) Discuss the creation of a color wheel and the importance of primary, secondary, and tertiary colors.
- 15. (a) Discuss the characteristics of Indian art, focusing on Mughal and Rajasthani miniature painting styles.

Or

(b) Provide an overview of the key art movements in Western art history from Medieval to Romanticism, highlighting their unique characteristics and themes.

C - 2366

### Answer all questions.

16. (a) Describe the different techniques for creating texture and shading in a drawing using dots, hatching, and diverging lines.

Or

- (b) Explain the concept of surface limits in art. How can artists manipulate surface limits to create depth and perspective in their work?
- 17. (a) Differentiate between linear perspective and aerial perspective. Provide examples of when each type of perspective is used in art.

Or

- (b) Explain the process of constructing a one-point perspective drawing. Provide step-by-step instructions and an example.
- 18. (a) What are the essentials of human figure drawing? How does an understanding of proportion and gesture contribute to successful figure drawing?

Or

- (b) Compare and contrast quick sketches and detailed studies from live figures. What are the advantages and limitations of each approach?
- 19. (a) Create a color wheel and describe the primary, secondary, and tertiary colors. How does a color wheel help artists understand color relationships?

Or

(b) Explore the psychological aspects of color. How can artists use color psychology to evoke specific emotions or moods in their artwork.

C-2366

| 20. | (a) | Explore the significance of Ajanta and Ellora Cave |
|-----|-----|--|
|     |     | painting in the history of Indian art.             |

Or

(b) Compare and contrast Western art movements from Medieval to Romanticism.

Sub. Code 82815/82915

### **B.Sc. DEGREE EXAMINATION, APRIL 2024**

#### First Semester

#### INTRODUCTION TO VISUAL COMMUNICATION

### (Common for Game Art and Design/Visual Effects)

### (2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Which of the following is NOT a barrier of communication?
  - (a) Language barriers
  - (b) Physical barriers
  - (c) Cultural barriers
  - (d) Clarity and comprehension
- 2. What is universal understanding in visual communication?
  - (a) Communicating with a global audience
  - (b) Using complex symbols
  - (c) Clarity and comprehension
  - (d) Avoiding non-verbal communication

| 3. | Wha<br>mod | at are the levels of communication in the SMCR el? |
|----|------------|--|
|    | (a)        | Sender, Message, Receiver                          |
|    | (b)        | Verbal, Non-verbal, and Written                    |
|    | (c)        | Encoding, Decoding, Feedback                       |
|    | (d)        | Technical, Semantic, and Pragmatic                 |
|    | 3371 •     |  |

- 4. Which communication model emphasizes the role of gatekeepers in the media?
  - (a) Lasswell's Model
  - (b) Dance's Helical Model
  - (c) Whites Gatekeeper Theory
  - (d) Two-step Flow Theory
- 5. Which aspect of semiotics deals with the psychological impact of colors?
  - (a) Denotations
  - (b) Connotations
  - (c) Visual illusions
  - (d) Color psychology and theory
- 6. What is the process of developing ideas in visual communication?
  - (a) Research
  - (b) Sensory perceptions
  - (c) Ideation and creative thinking
  - (d) Design execution and presentation

C-2367

| 7. |     | ch aspect of communication is related to media ethics responsibility? |
|----|-----|---|
|    | (a) | Understanding communication theories                                  |
|    | (b) | Strategic communication   |
|    | (c) | Media ethics  |
|    | (d) | Global perspective  |

- 8. Which one focuses on cross-cultural communication?
  - (a) Visual Communication
  - (b) Semiotics and Visual Perception
  - (c) Communication and Public Opinion
  - (d) Mass Media Communication
- 9. What is the primary focus of the "Uses and Gratification" model in mass media communication?
  - (a) Media and democracy
  - (b) Media effects on individuals
  - (c) Media and advertising
  - (d) Media management and business
- 10. What does the term "Media Management and Business" refer to in mass media communication?
  - (a) The business aspect of media organizations
  - (b) Managing media ethics
  - (c) Media effects on society
  - (d) Media and advertising

C - 2367

#### Answer all questions.

11. (a) What are the key aspects of visual communication, and how do they contribute to clarity and comprehension in communication?

Or

- (b) How does visual communication contribute to problem-solving in various contexts?
- 12. (a) Compare and contrast Lasswell's Model, Two-step flow theory, and Schramm's Circular Model in the context of visual communication.

Or

- (b) How does the concept of "Levels of Communication' (Technical, Semantic, Pragmatic) apply to visual communication, and why is it important?
- 13. (a) How does colour physiology and theory influence visual communication?

Or

- (b) Define semiotics and discuss its relevance in visual communication.
- 14. (a) Discuss the significance of communication theories in shaping public opinion.

Or

4

C-2367

- (b) What are the challenges and strategies for crosscultural communication in the context of public opinion?
- 15. (a) Analyze the effects of mass media on society, and explain the Hypodermic Needle Model and Uses and Gratification Model.

Or

(b) Provide an overview of theories related to mass media and explain their relevance in understanding the impact of media on society.

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

Answer all questions.

16. (a) How does clarity and comprehension play a vital role in visual communication, and what are the potential barriers to achieving them?

Or

- (b) Discuss the significance of universal understanding in visual communication and its impact on effective communication.
- 17. (a) Describe the SMCR Model in visual communication. How does it help in understanding the communication process.

Or

(b) How can one develop enhanced communication skills in the field of visual communication? Provide practical strategies and techniques.

C-2367

18. (a) Explain the principles of visual-sensory perceptions and their impact on design.

Or

- (b) Discuss the design process, including research, concept development, and execution, in the context of visual communication.
- 19. (a) Analyze the formation of public opinion and its relationship with communication.

Or

- (b) Discuss the ethical considerations in media communication.
- 20. (a) Describe the different aspects of mass media communication, including media systems, effects, and its role in democracy.

Oı

(b) Discuss the significance of media management and business in the context of the mass media industry.

C-2367

1.

Sub. Code

82823

## **B.Sc. DEGREE EXAMINATION, APRIL 2024**

#### **Second Semester**

#### Game Art and Design

#### **DESIGN STUDY**

### (2023 onwards)

| Duration: 3 Hours |        | Maximum : 75 Marks   |
|-------------------|--------|----------------------|
|                   | Part A | $(10 \times 1 = 10)$ |

Answer all questions.

The elements of design which refer to the path created by

- a moving point (b) Line (a) Shape Texture (d) Colour (c) 2. Identify the characteristics of a design Static (b) Restricted to single medium (a) (c) Limitless (d) Focused solely
- 3. What principle of design focuses on the distribution of visual weight in a composition?
  - (a) Harmony(b) Contrast(c) Emphasis(d) Proportion
- 4. What fundamental element of design emphasizes the outline or contour of objects within a composition?
  - (a) Proportion(b) Line(c) Scale(d) Shape

| 5.  | Which of the following is not an attribute of colour?                                   |                     |        |                             |
|-----|---|---------------------|--------|-----------------------------|
|     | (a)   | Hue                 | (b)    | Clarity                     |
|     | (c)   | Saturation          | (d)    | Value                       |
| 6.  | The   | result of blending  | of tw  | vo complementary colour is  |
|     | (a)   | High contrast       | (b)    | Low contrast                |
|     | (c)   | No contrast         | (d)    | Greyscale                   |
| 7.  | Selectext   | et the term for the | style  | and appearance of a printed |
|     | (a)   | Type face           | (b)    | Serif                       |
|     | (c)   | Font                | (d)    | Glyph                       |
| 8.  | Select a most suitable format for images with complex color gradients and transparency. |                     |        |                             |
|     | (a)   | JPEG                | (b)    | PNG                         |
|     | (c)   | GIF                 | (d)    | BMP                         |
| 9.  | provides a sense of order and balance in page layout design.                            |                     |        |                             |
|     | (a)   | Text                | (b)    | Image                       |
|     | (c)   | Whitespace          | (d)    | Elements                    |
| 10. | 10. The first stage of design process is  |                     | ess is |                             |
|     | (a)   | Research            | (b)    | Ideation                    |
|     | (c)   | Execution           | (d)    | Finalization                |
|     |   |                     | 2      | C-2368                      |
|     |   |                     |        |                             |

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

Answer all questions.

11. (a) What is the primary function of a point in a design?

Or

- (b) Explain the importance of creativity in design.
- 12. (a) Explain about creative expression.

Or

- (b) Explain the contextual application.
- 13. (a) Explain the attributes of a colour.

Or

- (b) Discuss about the colour psychology.
- 14. (a) Explain the types of typography.

Or

- (b) Explain about assembling and filtering an image.
- 15. (a) Explain the important parts of a layout.

Or

(b) Explain the different stages of the design process.

3

C - 2368

Part C

 $(5 \times 8 = 40)$ 

#### Answer all questions.

16. (a) Explain the characteristics of a design and designer's mind.

Or

- (b) Discuss in detail the principles of design.
- 17. (a) Discuss in detail the patter and repetition.

Or

- (b) Explain the lines and shapes and its importance.
- 18. (a) Explain in detail the basics of colour theory.

Or

- (b) Explain about colour contrast and colour harmonies.
- 19. (a) Elaborate on the importance of graphics in designing.

Or

- (b) Explain the colour manipulation techniques.
- 20. (a) Elaborate on factors influencing a layout.

Or

(b) Discuss in detail the design process.

Sub. Code

82825

### **B.Sc. DEGREE EXAMINATION, APRIL 2024**

#### **Second Semester**

### Game Art and Design

#### CRITICAL STUDIES FOR GAMES

#### (2023 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Which imaging technology is commonly associated with vector games?
  - (a) Pixel based
- (b) Vector based
- (c) Text based
- (d) Bit map based
- 2. Which of the following is a precursor to modern video games?
  - (a) Chess
- (b) Baseball
- (c) Checkers
- (d) Monopoly
- 3. Which region of the world is known for its significant contributions to the video game industry, including popular titles and influential developers?
  - (a) North America
- (b) Europe
- (c) Asia
- (d) Australia

| 4. | Which ger  | are of v | video ga | mes em | phasi | zes realistic | con | ıbat |
|----|------------|----------|----------|--------|-------|---------------|-----|------|
|    |            |          | s viewe  | d from | the   | perspective   | of  | the  |
|    | protagonis | st?      |          |        |       |               |     |      |

- (a) Role-playing games (RPGs)
- (b) Platformer games
- (c) Puzzle games
- (d) First-person shooting (FPS) games
- 5. Which of the following video games is among the best-selling of all time?
  - (a) Tetris
- (b) Simcity
- (c) Pong
- (d) Alone in the dark
- 6. Graphics in video games primarily refer to
  - (a) Dialogue narrative and structure
  - (b) Character development and story arcs
  - (c) Visual elements and aesthetics
  - (d) Sound effects and music composition
- 7. What characterizes the game market in recent years?
  - (a) Declining interest in gaming among younger demographics
  - (b) Limited diversity in game genres and themes
  - (c) Rapid growth and expansion with diverse platforms and audiences
  - (d) Stagnant technological advancements in gaming devices
- 8. The end user experience in gaming refers to:
  - (a) The process of game development
  - (b) The interactions and emotions players have
  - (c) Marketing strategies employed
  - (d) The technical specifications of gaming hardware

C - 2369

| 9.  |      | ch of the following is NOT a type of Intellectual perty (IP)? |
|-----|------|---|
|     | (a)  | Copyright (b) Trade mark                                      |
|     | (c)  | Patent (d) Software   |
| 10. | IP n | neans   |
|     | (a)  | International Publisher                                       |
|     | (b)  | Internet Part   |
|     | (c)  | Inter Period  |
|     | (d)  | Intellectual Property   |
|     |      | Part B $(5 \times 5 = 25)$                                    |
|     |      | Answer all questions.   |
| 11. | (a)  | What is imaging technology? Explain.                          |
|     |      | $\operatorname{Or}$   |
|     | (b)  | Explain the importance of interactive mocies.                 |
| 12. | (a)  | Explain about handheld video system.                          |
|     |      | $\operatorname{Or}$   |
|     | (b)  | Explain the shareware games.                                  |
| 13. | (a)  | Explain the importance of graphics in video games.            |
|     |      | $\operatorname{Or}$   |
|     | (b)  | Explain on video game rating system.                          |
| 14. | (a)  | Explain about the tabletop game industry.                     |
|     |      | $\operatorname{Or}$   |
|     | (b)  | Elaborate on the game market.                                 |
|     |      | 3 <b>C-2369</b>   |
|     |      |   |
|     |      |   |
|     |      |   |
|     |      |   |

9.

| 5. (a) Explain about intellectual property. |   |  |  |
|---|---|--|--|
|   | $\operatorname{Or}$   |  |  |
| (b)   | Explain the purpose of IP.                                      |  |  |
|   | Part C $(5 \times 8 = 40)$                                      |  |  |
|   | Answer all questions.   |  |  |
| (a)   | Explain in detail about new generation home video game systems. |  |  |
|   | $\operatorname{Or}$   |  |  |
| (b)   | Discuss in detail arcade games and Atari games.                 |  |  |
| (a)   | Discuss the role of online in playing video games.              |  |  |
|   | $\operatorname{Or}$   |  |  |
| (b)   | Explain the video games used in Europe.                         |  |  |
| (a)   | Explain in detail the video game development process.           |  |  |
|   | $\operatorname{Or}$   |  |  |
| (b)   | Elaborate on best-selling video games.                          |  |  |
| (a)   | Explain the pros and cons of game impacts.                      |  |  |
|   | $\operatorname{Or}$   |  |  |
| (b)   | Explain in detail the impact of games on players.               |  |  |
| (a)   | Elaborate on the core of the game versus the core of the IP.    |  |  |
|   | Or  |  |  |
| (b)   | Discuss in detail the sequels creation and its types.           |  |  |
|   | 4 <b>C-2369</b>   |  |  |
|   |   |  |  |
|   | (b) (a) (b) (a) (b) (a) (b) (a)                                 |  |  |