### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

### Second Semester

### Game Arts and Design

#### CRITICAL STUDIES FOR GAMES

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Write about Imaging technologies.
- 2. What is CD-Rom games?
- 3. Write about shareware games.
- 4. Write about sony play station.
- 5. What is flight simulator?
- 6. Write about castle wolfenstein.
- 7. Define hidden agenta.
- 8. What is designer being accountable?
- 9. Write about core of the game.
- 10. Write about purpose of IP.

|     |     | Part B                          | $(5 \times 5 = 25)$ |
|-----|-----|---------------------------------|---------------------|
|     |     | Answer all questions.           |                     |
| 11. | (a) | What is vectrogames?            |                     |
|     |     | $\operatorname{Or}$             |                     |
|     | (b) | Write about interactive movies. |                     |

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Write about lara croft.

12.

(a)

Or

- (b) Describe person shooting games.
- 13. (a) Write about game generes.

Or

- (b) What is PAC-MAN?
- 14. (a) What is game market?

Or

- (b) Write about target audience.
- 15. (a) Write about honor the player.

Or

(b) Explain about focus groups.

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

Answer all questions.

16. (a) Explain in detail about video game development process.

Or

(b) Explain about Nintendo.

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| 17. ( | a) I | Describe | graphics | in | video | games. |
|-------|------|----------|----------|----|-------|--------|
|-------|------|----------|----------|----|-------|--------|

Or

- $(b) \quad Explain \ about \ handheld \ video \ game \ systems.$
- 18. (a) Explain about new generation of home video game systems.

Or

(b) Describe sequels and its types.

### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

#### Third Semester

# Game Art and Design

### 3D DIGITAL ART FOR GAMES

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is blocking?
- 2. State the functions of shaping.
- 3. Define modeling.
- 4. What is kid bashing?
- 5. Define static mesh.
- 6. What is game art?
- 7. Define proportion.
- 8. What is layout?
- 9. State the purpose of project panel.
- 10. State the importance of size and scale in game design.

Part B

 $(5 \times 5 = 25)$ 

Answer all questions.

11. (a) Discuss on productive modelling.

Or

- (b) Explain modelling animation.
- 12. (a) List down the core modelling techniques used in games.

Or

- (b) Outline the concept of static mesh.
- 13. (a) Write note on vehicle proportion and scale in game design.

Or

- (b) Explain basics of vehicle modelling.
- 14. (a) Write note on UV layout optimization.

Or

- (b) Describe on shade development.
- 15. (a) Explain how to export assets in 3D modelling?

Or

(b) Write notes on inspector panel.

Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain various methods to produce digital 3D objects.

Or

(b) Explain the techniques to achieve complex shapes in Maya modelling with suitable example.

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17. (a) Explain the important points to consider while creating a vehicle for game environment.

Or

- (b) Outline the theories of LOD.
- 18. (a) Summarise the procedure to convert 2D images to 3D images.

Or

- (b) Explain the following
  - (i) Normal and one-sided objects.
  - (ii) Texture pipeline.

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### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

### **Third Semester**

# Game Art and Design

#### DESIGN AND COMMUNICATION FOR GAME DESIGN

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What are 2D game objects called?
- 2. What are game objects?
- 3. State the functions of lighting.
- 4. What is the difference between a HUD and a GUI in a game?
- 5. Define form.
- 6. Mention the importance of colours in game.
- 7. Define space.
- 8. What are mechanics and triggers?
- 9. What do you mean by gradient reverb?
- 10. Write short note audio filter.

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

Answer **all** questions.

11. (a) Discuss on 2D game and art.

Or

- (b) What are the differences between 2D and 3D games in Unity?
- 12. (a) Write note on 2D character.

Or

- (b) Outline the importance of shading in game design.
- 13. (a) What are game controls called?

Or

- (b) What are dynamics in game design?
- 14. (a) State the importance of prototyping.

Or

- (b) What are the important key points in game design?
- 15. (a) Why is sound design important in games?

Or

(b) Write notes on sound scripting.

Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain how to import and work with 2D game object with suitable example.

Or

- (b) Write note on
  - (i) Unity.
  - (ii) Maya.

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| 17. | (a) | Elaborate on | particle system | and their uses. |
|-----|-----|--------------|-----------------|-----------------|
|-----|-----|--------------|-----------------|-----------------|

Or

- (b) Write note on
  - (i) Purpose of the thaumatrope.
  - (ii) Lighting techniques.
- 18. (a) How to profile and optimize sound foe game design? Explain.

Or

- (b) Explain the following
  - (i) Using game engines for prototyping.
  - (ii) Using game engines for Designing.

### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

#### Third Semester

# Game Art and Design

#### **GAME PRODUCTION**

### (2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. State the role of game publisher.
- 2. Who is game designer?
- 3. Define game mechanics.
- 4. Define project management.
- 5. What does core mean in games?
- 6. What factors affect game design?
- 7. Why is game design important?
- 8. Define three act play.
- 9. What are all puzzle games?
- 10. Write short note on visual media.

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

Answer all questions.

11. (a) Define the role and importance of game designer.

Or

- (b) What are the skills required for a game producer?
- 12. (a) Elaborate on game developer team.

Or

- (b) Outline the team structure of game design.
- 13. (a) List the types of puzzle games.

Or

- (b) What are the points to considered while designing lateral thinking game?
- 14. (a) State the importance of stories in interactive form.

Or

- (b) What are decision trees? Explain.
- 15. (a) Explain scheduling in game production.

Or

(b) Write notes on personal experience stories.

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

Answer **all** questions.

16. (a) Explain how to integrate different game mechanics by mind mapping and logical thinking.

Or

(b) How game can be used as a tool to create awareness? Elaborate.

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17. (a) Explain in detail about the constraints on game design.

Or

- (b) Write note on
  - (i) Stories with exposition and metaphors.
  - (ii) Fun in storytelling.
- 18. (a) Explain in detail about the importance and types of stories.

Or

- (b) Explain the following with examples.
  - (i) Serious games.
  - (ii) Casual games.

### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

#### **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 should be the ideal duration of a game level?
- 2. Who is the target audience of the game?
- 3. What is Combat area?
- 4. What is pretty scenery?
- 5. What is Dexterity Challenge?
- 6. Write about Prospero's house.
- 7. Define Ambiance.
- 8. What is Flow?
- 9. Write about tutorial levels.
- 10. Write about road object.

### Answer all questions.

11. (a) Explain the process of Reducing repetitive travel in game design.

Or

- (b) Write about Houses and Interiors in game design.
- 12. (a) Write about BG design.

Or

- (b) Describe sprite animation.
- 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.

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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.

### **B.Sc. DEGREE EXAMINATION, APRIL 2023.**

#### **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 alpha textures?
- 4. What is dynamic topology?
- 5. What is Zmodeler?
- 6. Write about Avatars.
- 7. Define color palette.
- 8. What is Basic rigging?
- 9. Write about sculpting bruches.
- 10. Write about diffuse maps.

Part B

 $(5 \times 5 = 25)$ 

### Answer all questions.

11. (a) What is Box modeling?

Or

- (b) Write about Character mood.
- 12. (a) Write about Shape Theory.

Or

- (b) Describe Flocking.
- 13. (a) Write about Design Strategy.

Or

- (b) What is 3D Digital Sculpting?
- 14. (a) What is Teleportation?

Or

- (b) What are Character Archetypes?
- 15. (a) Write about Dynamesh.

Or

(b) Explain the process of choosing Design theme.

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Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain in detail about Graph theory.

Or

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

Or

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

Or

(b) Describe baking detail to low poly.