

**C-3713**

**Sub. Code**

**82813**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**First Semester**

**INTRODUCTION TO VISUAL COMMUNICATION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Explain perceptual barriers.
2. Define Intrapersonal Communication.
3. Define Transactional Model of Communication.
4. What is Berlo's model?
5. What is Design Execution?
6. What does it mean to be a visual thinker?
7. Define global media.
8. Does a cultural difference affect good communication.
9. What is the use of digital media?
10. List out the different forms of traditional media.

**Part B**

(5 × 5 = 25)

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

11. (a) What are the major functions of mass communication?

Or

- (b) What are the four types of verbal communication?

12. (a) Explain the Gatekeeping theory.

Or

- (b) Explain two step flow theory.

13. (a) What are the principles of color theory?

Or

- (b) Write about Gestalt principles of perception.

14. (a) What are the signs and symbols in art?

Or

- (b) What are the impacts of information communication technology in developing countries?

15. (a) What are the positive and negative effects of mass media?

Or

- (b) Write about the Infotainment media.

**Part C**

(3 × 10 = 30)

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

16. (a) Language is not only used for communication but also self-expression – Justify.

Or

- (b) Write an essay on the formal and informal communication.

17. (a) What are the advantages and disadvantages of Dance's Helix model? Explain.

Or

- (b) Differentiate Connotative and Denotative meanings of words.

18. (a) Write an essay on the cultural codes and language strategies in Business Communication.

Or

- (b) Write an essay on the advantages and disadvantages of electronic media.

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**C-3714**

**Sub. Code**

**82814**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**First Semester**

**FUNDAMENTALS AND HISTORY OF ART**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is shading in art?
2. Explain cross hatching techniques.
3. Define curvilinear perspective.
4. What is Art's perspective?
5. What are figure studies?
6. Draw a cube and convert it into a body part.
7. Explain the subtractive color model.
8. What two colors make red?

9. Mention the places where cave paintings are found in India.
10. What does gothic style mean?

**Part B** (5 × 5 = 25)

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

11. (a) Write a short note on visual repetition.
- Or
- (b) What is called as Expressive line?
12. (a) Differentiate vertical and horizontal construction lines.
- Or
- (b) What is ground plane in perspective drawing?
13. (a) Explain the use of underdrawing.
- Or
- (b) Why is the center of mass important in human figure drawing?
14. (a) What are Monotone chromatic colors?
- Or
- (b) What is the difference between hue and saturation?
15. (a) Write about calligraphy.
- Or
- (b) What are called river valley civilization? Give examples.

**Part C**

(3 × 10 = 30)

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

16. (a) Explain the artistic use of light and dark, which is also known as value in art.

Or

- (b) Explain the following lines :

(i) vertical lines

(ii) zigzag lines

(iii) diagonal lines

(iv) curved lines and

(v) degree of curve.

17. (a) Draw a building in one point perspective, two point perspective and three point perspective, and then explain the techniques.

Or

- (b) Write an essay on the proportions and balancing values and shapes of a human body.

18. (a) Write an essay on the Psychological properties of colors used in traditional art and modern art.

Or

- (b) Describe the Mughal art forms and focus on Mughals architecture.

**C-3715**

**Sub. Code**

**82824**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Second Semester**

**CRITICAL STUDIES FOR GAMES**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define Gamification.
2. What is Wii?
3. How online shooter games work?
4. Define free-to-play.
5. What is called a PG label in video games?
6. Importance of sound design in video games.
7. Write about Simcity game design.
8. What is called as Gaming convention?
9. Define Prelude.
10. What is cross-platform gaming?

**Part B**

(5 × 5 = 25)

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

11. (a) Write a note on Sony Playstation.

Or

- (b) Explain any four video game genres.

12. (a) Differences between single-player and multiplayer games.

Or

- (b) How many generations of video game consoles are there? Explain two of them.

13. (a) What are the best selling video games of all time?

Or

- (b) List different types of video game genres and explain.

14. (a) What is games used experience (UX) and how does it help?

Or

- (b) Write about the Tabletop game industry.

15. (a) Write about design constraints in video games.

Or

- (b) Write about focus group research.



**Part C**

(3 × 10 = 30)

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

16. (a) Explain the effects of violent games on youth in early days and compare it with contemporary games.

Or

- (b) Explain online games, addiction and overuse of today's video game industry.

17. (a) How does the gaming community adapt to home gaming? Explain.

Or

- (b) Write an essay on exploited morals and ethics in video games.

18. (a) How to pitch a game to publishers? Explain.

Or

- (b) Discuss how Tencent claims the record of 100 million daily users on their mobile game platforms.

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**C-3716**

**Sub. Code**

**82832**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Third Semester**

**3D DIGITAL ART FOR GAMES**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is called as complex shapes?
2. Explain body blocking.
3. Explain high poly baking.
4. Write a short note on edge modeling.
5. Define munsell colour system.
6. Explain triangulation.
7. Write about color ID map.
8. Explain handmade texture.
9. What is called as game view?
10. Explain the use of tree editor in unity.

**Part B**

(5 × 5 = 25)

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

11. (a) How to optimize a Maya scene?

Or

- (b) Discuss surface stretching.

12. (a) What are 3D game objects?

Or

- (b) Write a note on environment sketches.

13. (a) Explain how to use substance painter for realistic texturing of modular structures.

Or

- (b) What are the differences between colour wheel and colour table?

14. (a) Explain diffusion and reflection.

Or

- (b) Write about real-time bump mapping technique.

15. (a) What is a gaming interface?

Or

- (b) What is the importance of terrain modeling in games?

**Part C**

(3 × 10 = 30)

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

16. (a) Write an essay on the 3D modeling tools to achieve polygonal geometrical shapes.

Or

- (b) Explain the following (i) viewpoint (ii) shading (iii) edges and vertices.

17. (a) Write an essay on the professional model making/Kit bashing in film and game art.

Or

- (b) How to texture large assets and assets with high detail level to retain texture density? Explain.

18. (a) How physically based rendering achieves accurate simulation of photo-realism?

Or

- (b) Explain the sculpting process in creating a game environment.

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**C-3717**

**Sub. Code**

**82833**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Third Semester**

**DESIGN AND COMMUNICATION FOR GAME DESIGN**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is a sprite sheet?
2. Who is Daniel Hillis, what is his contribution to 2D video game?
3. Define key mapping.
4. Explain the use of ESDF keys in game control.
5. What is called game physics?
6. Define static particles.
7. Explain excessive development time.

8. Give any two limitations in paper prototypes?
9. Write about open game art's game asset store.
10. Explain Behavioral profiling in games.

**Part B**

(5 × 5 = 25)

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

11. (a) Write about NES games.

Or

- (b) What are the uses of light gun?

12. (a) How the HUD is displayed?

Or

- (b) Explain the natural mapping on interactivity in motion-based video games.

13. (a) Write a note on simulation stage of particle system technique.

Or

- (b) What is the difference between shape and form in art?

14. (a) What are the steps in prototyping?

Or

- (b) Explain the evolutionary approach of prototyping.

15. (a) What is optimization in video games?

Or

- (b) Explain the differences between game assets and character assets.

**Part C**

(3 × 10 = 30)

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

16. (a) How to add a controllable player object in unity 2D?  
Explain.

Or

- (b) Create a story board for a 2D game prelude and design objects for it.

17. (a) Explain the player-video game interaction concept.

Or

- (b) Explain the natural occurrences and applications of persistence of vision.

18. (a) Write an essay on the 2D game engines like react, Unity, Godot, construct.

Or

- (b) Write about optimization and high-end effects and their performance impact in game.

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**C-3718**

**Sub. Code**

**82834**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Third Semester**

**GAME PRODUCTION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the key responsibilities of a game developer?
2. Explain the structure of the mock role-play mechanics.
3. What is the role of a video game publisher?
4. Define codebase.
5. What is called as pick-ups in video games?
6. What does pattern Guessing Puzzle mean?
7. Give two examples of Gameplay Segmentation.
8. How an interactive story works in a game?
9. Define social games.
10. What are alpha and beta in games?



**Part B**

(5 × 5 = 25)

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

11. (a) What skills are needed for game designer?

Or

- (b) Define Design Prototypes.

12. (a) Write a short note on tasks of Game Development Team.

Or

- (b) Explain any fantasy-themed persistent world game with its game play.

13. (a) What is called as ammunition pack in shooting games?

Or

- (b) Write a note on constraints of sports video games.

14. (a) Explain Bateman's Dynamic object-oriented narrative structure.

Or

- (b) Explain the story of the game Super Mario.

15. (a) Write a note on a massively multiplayer online game.

Or

- (b) What are the differences between game patches and game updates?

**Part C**

(3 × 10 = 30)

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

16. (a) Explain the selling strategies of your vision, ideas to the games industry.

Or

- (b) Write an essay on the careers choice and opportunities in Video Game Development.

17. (a) Describe the specifically defined roles in the Game Development.

Or

- (b) Explain the constants, constraints and conditions of a game.

18. (a) Create a story for a game and explain the exposition and resolution.

Or

- (b) Write an essay on the organic and inorganic game marketing strategies in Android game industry.

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C-3719

Sub. Code

82842

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Fourth Semester**

**LEVEL DESIGN FOR GAME**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Write about tile-based games.
2. What is the use of grid sheet?
3. What is the role of a level designer?
4. How to draw a maze with different shapes?
5. What is called as in-house play testing?
6. Why rules are important in game?
7. What is called as multiplayer maps?
8. Explain the use of rough maps in level design.
9. Define game resolution.
10. Define vegetation.

**Part B**

(5 × 5 = 25)

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

11. (a) How to represent isometric levels as 2D arrays?

Or

- (b) Draw a Top Down 2D grid and the same in Isometric view.

12. (a) In environment designing, how light sources affect shadows and highlights?

Or

- (b) What are called segments in a game design?

13. (a) What are the advantages and disadvantages of play testing?

Or

- (b) Compare the game detailing of any two android games your played.

14. (a) What are the elements of will come under Assets list?

Or

- (b) Explain characteristics of static meshes.

15. (a) What is Splatmap?

Or

- (b) How to put grass in terrain?

**Part C**

(3 × 10 = 30)

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

16. (a) Explain the four essential layers/perspectives of game design.

Or

- (b) Write an essay on the creative part of camera angles in a game design and explain the game ideation process.

17. (a) How to make a sprite design, sprite sheet in Adobe Photoshop? Explain the steps.

Or

- (b) Explain the following (i) environment setting (ii) location (iii) theme (iv) lighting reference and (v) obstacles.

18. (a) How scale factors are used to create shapes, maps and drawings in a game level design? Explain.

Or

- (b) Draw five different road objects for a race game and explain the nature and characteristics of those objects.

**C-3720**

**Sub. Code**

**82843**

**B.Sc. DEGREE EXAMINATION**

**GAME ART AND DESIGN**

**APRIL 2021 EXAMINATION**

**&**

**APRIL 2020 ARREAR EXAMINATION**

**Fourth Semester**

**3D CHARACTER DESIGN FOR GAME**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is called as three-dimensional model?
2. Define symmetry.
3. What is albedo map?
4. What is the process of texture mapping?
5. Explain soft-body dynamics.
6. What is retopology and how do it with Z brush?
7. Define multi-texturing.
8. What is a position map substance?
9. What is skinning in animation?
10. Explain Skeletal meshes.

**Part B**

(5 × 5 = 25)

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

11. (a) Explain edge flow.

Or

- (b) What is deforming in character modeling?

12. (a) What are the key differences between bump mapping vs displacement mapping?

Or

- (b) Write a short note on the head and hand anatomy.

13. (a) What is sculpting in 3D modeling? List out any five different tools for sculpting.

Or

- (b) Explain Dynamesh and its subdivisions.

14. (a) What is called as texture filtering?

Or

- (b) What are the limitations of lightmaps?

15. (a) Explain Rotation order of an animated object.

Or

- (b) Differentiate inverse and forward kinematics.

**Part C**

(3 × 10 = 30)

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

16. (a) Explain the elements of cartography and map coloring.

Or

- (b) Explain the steps of 3D character creation.

17. (a) How to sculpting hair with fiber mesh? Differentiate the techniques to create hair, beard, mustache, eyebrows, eye lashes and body fur.

Or

- (b) Write an essay on sculptural processes including carving, modeling, assembly and casting.

18. (a) Explain the surface and volume process in physically based rendering.

Or

- (b) Explain the revolute joints and prismatic joints in an articulated body.

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