

**C-7424**

**Sub. Code**

**82813**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**First Semester**

**Game Arts and Design**

**INTRODUCTION TO VISUAL COMMUNICATION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What makes good visual communication?
2. What is perception?
3. What are communication symbols?
4. What is semantic?
5. What is mass media?
6. Write about levels of communication.
7. Define narrative representation.
8. What is associative technique?
9. Write about design execution.
10. Write about global media.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Describe communication as process.

Or

- (b) Write about posters.

12. (a) Write about Lasswell's model.

Or

- (b) Describe levels of communication.

13. (a) Write about Design process.

Or

- (b) Write about syntagmatic aspects of sign.

14. (a) Write about denotation culture.

Or

- (b) Describe multi-cultural content.

15. (a) Describe print media.

Or

- (b) Describe digital media.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about barriers to communication.

Or

- (b) Explain about traditional media.

17. (a) Describe SMCR communication model.

Or

- (b) Write about whites gatekeeper theory.

18. (a) Explain visual thinking.

Or

- (b) Write about semiotics.
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**C-7425**

**Sub. Code**

**82814**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**First Semester**

**Game Art and Design**

**FUNDAMENTALS AND HISTORY OF ART**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define hatching.
2. What is shading?
3. What is cylindrical form?
4. What is one point view?
5. What is proportion?
6. Write a note on free stroke.
7. Define saturation.
8. What is color wheel?
9. Write about Warli painting.
10. Write about bronze art.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What is geometric structure?

Or

- (b) Write about repeated image.

12. (a) Write about perspective views.

Or

- (b) Write about picture plane.

13. (a) Write about line of action.

Or

- (b) Write about stick figure.

14. (a) What is tertiary color?

Or

- (b) Write about color contrast.

15. (a) Write about Expressionism.

Or

- (b) Explain Neoclassicism.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Compare linear and aerial perspective.

Or

(b) How is body parts simplified into 2D shapes?

17. (a) Explain about early civilization paleolithic age.

Or

(b) Write about Japanese woodblock painting.

18. (a) Describe about Ajanta and ellora cave painting.

Or

(b) Explain foreshortening in detail.

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**C-7415**

**Sub. Code**

**83223/82823**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Second Semester**

**DESIGN STUDY**

**Common for B.Sc (Animation) B.Sc. (Game Art  
and Design)**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define – Achromatic.
2. List out the significance of Design.
3. What is cool colours?
4. What do you mean by colour contrast?
5. Define – raster graphics.
6. What do you mean by colour manipulation?
7. List out the different types of balance.
8. What is non-white space?
9. State the different stages of design process.
10. What are the needs of grid system?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the characteristics of design.

Or

- (b) Discuss the importance of designer mind.

12. (a) Give a short note on attributes of colour.

Or

- (b) Explain about split compliments.

13. (a) Discuss about different types of graphics.

Or

- (b) Explain about vector graphics.

14. (a) Give a short note on usage of negative space.

Or

- (b) Differentiate between white and non-white space.

15. (a) Discuss the need of different part in page layout.

Or

- (b) Explain the knowledge of design process for designer.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Elaborate different qualities of designers.

Or

- (b) Describe the different challenges in designing.



17. (a) Distinguish between triads and tetrads.

Or

(b) Explain the need of spacing and alignment in designing.

18. (a) Describe about the different knowledge for designer.

Or

(b) Explain the crop and scale.

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**C-2139**

**Sub. Code**

**82824**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Second Semester**

**Game Art and Design**

**CRITICAL STUDIES FOR GAMES**

**(2019 – onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are interactive games?
2. Write about the Internet distribution of video games.
3. Define Shareware.
4. What is called as Arcade game?
5. Define General Aggression Model.
6. Explain Augmented Reality.
7. What are called as arcade machines?
8. Explain Video game live streaming.
9. Define Copyrights.
10. What is a game sequel? Give examples.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write about Handheld game consoles.

Or

(b) Write about 101 BASIC Computer games.

12. (a) How Bedroom Coders survives in game industry?

Or

(b) Write about the video game market in India.

13. (a) Write a note on First-person shooter video games and give examples.

Or

(b) Why Myst video game is called as graphic adventure puzzle video game?

14. (a) What is End User Experience Monitoring?

Or

(b) How a game can be designed for dynamic learning interactions?

15. (a) Write a short note on any multiplayer video game competition.

Or

(b) What are the main purposes of intellectual property?

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on the great video game crash in 1983.

Or

- (b) Explain the following

(i) Atari

(ii) Nintendo

(iii) Sega

(iv) Microsoft and

(v) PlayStation

17. (a) Write a brief history of handheld game consoles from GameBoy to Nintendo Switch.

Or

- (b) Explain the gameplay of Grand Theft Auto video game.

18. (a) Explain the relationship between women and video games.

Or

- (b) Write an essay on the history of video game focus group research.

**C-7426**

**Sub. Code**

**82832**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**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** questions.

1. What is 3D digital game art?
2. What is polygonal modelling?
3. Define deformers.
4. Expand LOD.
5. Define topology.
6. Mention the importance of body mesh.
7. Define texture.
8. What is PBR?
9. Define game engine.
10. What is sky box?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss on Maya modelling.

Or

(b) Explain sculpt geometry.

12. (a) What is game art? Give examples.

Or

(b) Outline the concept of animated mesh.

13. (a) List down the factors to be considered while creating vehicle for games.

Or

(b) How to bake high poly to low poly in Maya?

14. (a) Write note on specular map.

Or

(b) Write note on diffuse map.

15. (a) Explain how to import assets in 3D modelling?

Or

(b) Write notes on Art and design in Photoshop.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain various tools and techniques used to produce digital 3D objects.

Or

- (b) Explain the concept and methods used in the production of 3D digital objects.

17. (a) Explain the importance and types of game environment modelling.

Or

- (b) Write note on :

(i) Polygon 3D modelling

(ii) Prop 3D Modelling.

18. (a) Outline the components of game engine with suitable example.

Or

- (b) Explain the following :

(i) Handmade texture effect

(ii) Image based texture.

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**C-7427**

**Sub. Code**

**82833**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Third Semester**

**Game Art and Design**

**DESIGN AND COMMUNICATION FOR GAME DESIGN**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define 2D art.
2. What are game objects?
3. State the functions of game controls.
4. Expand GUI.
5. Define shape.
6. Mention the importance of perspective.
7. Define tiles.
8. What are triggers?
9. What do you mean by reverb zone?
10. Write short note on profiling.



**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss on importing of 2D object.

Or

(b) Explain sprite editor.

12. (a) What is anatomy? Give examples.

Or

(b) Outline the concept of game interface screen.

13. (a) State the principles of animation.

Or

(b) Outline the uses of particle system.

14. (a) State the importance of prototyping.

Or

(b) Define the following

(i) Score

(ii) Sound.

15. (a) Explain about sound scripting.

Or

(b) Write notes on building setting.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the concept of creating 2D Object using production techniques.

Or

- (b) Explain how to import 2D game assets.

17. (a) Elaborate on non-traditional controls and explain the problems associated with controls.

Or

- (b) Write note on :

- (i) 2D game engine
- (ii) Lighting and shading techniques.

18. (a) How to use game engines for prototyping and designing? Explain.

Or

- (b) Explain the following :

- (i) Optimizing sound effects.
  - (ii) 2D game.
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**C-7428**

**Sub. Code**

**82834**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Third Semester**

**Game Art and Design**

**GAME PRODUCTION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. State the role of game designer.
2. Who is game programmer?
3. State the role of sound designer.
4. What skills do game designers need?
5. What does core mean in games?
6. What is puzzle design?
7. Mention the importance of story in games.
8. Define three act play.
9. What are all casual games?
10. Write short note on social games.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What are the skills required for a game publisher?

Or

- (b) What are the skills required for a game developer?

12. (a) Outline the importance of team work while developing a game.

Or

- (b) Outline the perspective of game designer.

13. (a) List down the constraints on game design.

Or

- (b) Outline the characteristics of basic puzzle.

14. (a) State the importance of interactive story telling.

Or

- (b) List down the types of stories.

15. (a) Summarize the functions of game production.

Or

- (b) Write notes on game as art.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the work of a game designer in industry.

Or

- (b) How to sell original ideas to game industry? Explain the process.

17. (a) Elaborate on game development career choices.

Or

- (b) Write note on :

- (i) Pattern recognition
- (ii) Logic exploration.

18. (a) Explain in detail about special type of games.

Or

- (b) Explain the following :

- (i) Segmented stories as levels
  - (ii) Mortal and immortal stories.
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**C-6155**

**Sub. Code**

**82842**

**B.Sc. DEGREE EXAMINATION, APRIL 2022**

**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** questions.

1. What is called as isometric game assets?
2. What is the difference between plan view and elevation view?
3. Define level bugs.
4. How a 3D game does differ from a 2D game?
5. Who are Play testers?
6. Define game goals.
7. What is called as single player maps?
8. What is key light and fill light?
9. Define texture mapping.
10. What is called as setting time in a game?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What is the relationship between focal length and angle of view?

Or

- (b) Give a technical explanation for Isometric Projection.

12. (a) Write about the 1970's traditional Christopher Alexander's Design patterns.

Or

- (b) How In-accessible area in a game helps to create a Maze? Give examples.

13. (a) What are the five components that make up a game?

Or

- (b) Write about Player Directing.

14. (a) Why scale factors are important in building game object?

Or

- (b) What is the use of Bubble diagram?

15. (a) Write about the vegetation creation techniques for video games.

Or

- (b) Does resolution affect gameplay? Discuss.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain how a structured brainstorming session helping in game ideation.

Or

- (b) Write an essay on the color and emotions in video game design.

17. (a) How to draw a landscape for 2D games and 3D game? Explain.

Or

- (b) Explain the planning steps of Playable level design and Stand-alone game environment.

18. (a) Create a schematic drawing of a single player stand-alone game environment.

Or

- (b) Take any android game and analyze the atmosphere of the game.

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**C-6156**

**Sub. Code**

**82843**

**B.Sc. DEGREE EXAMINATION, APRIL 2022**

**Fourth Semester**

**Game Art and Design**

**3D CHARACTER DESIGN FOR GAME**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is hard surface modeling?
2. Define the principle of proportion.
3. What is a specular map?
4. How does bump mapping work?
5. What are called as deformable solids?
6. What is baking in texture?
7. What is an opacity map?
8. Define Texel.
9. What is rigging character?
10. What is the use of skeletal grouping?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain Edge loop.

Or

(b) What is shoulder geometry?

12. (a) Explain skin detailing.

Or

(b) Differentiate props, environment artists and character modeling artist.

13. (a) What are the differences between high poly and low poly models?

Or

(b) Explain the digital sculpting technology and its uses.

14. (a) Write a short note on PBR.

Or

(b) List out the atmospheric visual properties.

15. (a) What is the use of gimbal lock in animating a character?

Or

(b) Explain weight painting.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on the process of 3D Face Reconstruction.

Or

- (b) Explain four color map theorem and its uses.

17. (a) Write an essay on the types of texture mapping techniques.

Or

- (b) Explain mass-spring models, focus on cloth simulation.

18. (a) Summarize the common baking tasks in texture baking.

Or

- (b) Explain how Inverse kinematics added into the designed characters bones.
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**C-7422**

**Sub. Code**

**83251/82851/83051/  
83351/82951**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Fifth Semester**

**BUSINESS OF MEDIA**

**(Common for B.Sc. Animation / Game Art and Design /  
Graphic Design / Photography / Visual effects)**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define public sector.
2. Define the term franchise.
3. List some NGO's.
4. How will you identify a successful organization?
5. What is customer satisfaction?
6. List the types of stakeholder.
7. Define Customer.
8. What is Community?
9. What is Entrepreneurship?
10. What is market analysis?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) List out the firms in the private sector.

Or

- (b) Highlight the importance of structure.

12. (a) State the pros and cons of different structures.

Or

- (b) What are the pressures that you incur in business?

13. (a) List out the types of stakeholder.

Or

- (b) How will you satisfy your customers?

14. (a) How will you frame your business objectives and strategy?

Or

- (b) Write short note on human resources.

15. (a) Discuss briefly about market structures.

Or

- (b) What are the characteristics of Stakeholders?

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) How will you run an organization effectively?

Or

(b) Write about internal and external stakeholders.

17. (a) Explain Macro and Micro Economics with an example.

Or

(b) State the role of manager in an organization.

18. (a) Elaborate on the Channels of Communication.

Or

(b) Explain the theories of Entrepreneurship.

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**C-7423**

**Sub. Code**

**83252/82852/83052/  
83352/82952**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2022**

**Fifth Semester**

**PORTFOLIO AND PRESENTATION**

**(Common for B.Sc. Animation / Game Art and Design /  
Graphic Design / Photography / Visual effects)**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is Portfolio?
2. List out the importance of Digital Portfolio.
3. What is digital media?
4. Define Blog.
5. What are the requirements of good presentation?
6. Define Web page.
7. Write short note on Instagram.
8. Define tone.
9. List out the merits of Social media.
10. How will you work on your deadlines?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Highlight the importance of Portfolio.

Or

(b) Discuss about the elements of Portfolio.

12. (a) What are the requirements in the development of Portfolio?

Or

(b) Discuss about the effective digital showcase.

13. (a) Summarize the Presentation format and requirements.

Or

(b) Highlight the prospects of film portfolio presentation.

14. (a) How will you create your own blog?

Or

(b) State the importance of social media.

15. (a) Outline the components of a Portfolio.

Or

(b) List out the steps of publishing your Portfolio.



**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Elaborate on Digital Portfolio.

Or

(b) Discuss about the Portfolio Development Techniques - Do's and Don'ts.

17. (a) Explain the different stages of digital media.

Or

(b) How will you prepare a professional theatre for presentation?

18. (a) Explain the steps in creation of your own web page.

Or

(b) Explain Portfolio budget and Deadline planning.

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**C-7013**

**Sub. Code**

**16/17/23/25/  
26/27/29**

**COMMON FOR ALL U.G DEGREE COURSES  
EXAMINATION, NOVEMBER 2022**

**First/Second Semester**

**ENVIRONMENTAL STUDIES**

**(2019/2020 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Nonrenewable resources
2. Ecosystem
3. Food Chain of forest ecosystem.
4. Pandemic Emergencies.
5. Red Data Book
6. Hot spots
7. Climate Change
8. Deforestation
9. Biodiversity
10. Acid Rain

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Differentiate renewable and nonrenewable energy resources.

Or

- (b) Write notes on structure and functions of grassland ecosystem.

12. (a) Write notes on Food Webs of Forest Ecosystem with suitable examples.

Or

- (b) Write notes on Genetic, Species and Ecosystem Diversity.

13. (a) Write short notes on Food resources and its problems associated with them.

Or

- (b) Write notes on land resources and problem associated with them.

14. (a) Write notes on thermal pollution.

Or

- (b) Write notes on energy pyramids with suitable examples.

15. (a) Explore the threats to biodiversity.

Or

- (b) Write note on man-made disaster with special reference to strike.

**Part C**

(3 × 10 = 30)

Answer **all** the questions.

16. (a) Write an essay on multidisciplinary nature of environmental studies and about the need for public awareness on environment.

Or

- (b) Write an essay on Water Resources and problem associated with over-utilization of various water resources.
17. (a) Write an essay on Biogeographical classification of India.

Or

- (b) Write an essay on values of biodiversity.
18. (a) Write an essay on causes, effects and control measures of water pollution.

Or

- (b) Enumerate various strategies in managing disasters caused due to natural calamities.
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**C-5664**

**Sub. Code**

**16/17/23/25/  
26/27/29**

**Common for All U.G. B.Sc./B.B.A. DEGREE  
EXAMINATION, APRIL 2022**

**First/Second Semester**

**ENVIRONMENTAL STUDIES**

**(2019/2020 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. ZSI.
2. WII.
3. What is renewable energy?
4. Food web.
5. Pyramid of numbers in aquatic ecosystem.
6. Red data book.
7. List out any five Endemic species of India.
8. List out marine pollutants.
9. *Ex Situ* Conservation.
10. Enlist Option Values of Biodiversity.

**Part B**

(5 × 5 = 25)

Answer **all** the questions.

11. (a) Write notes on definition, scope and importance of environmental studies.

Or

- (b) Write notes on soil erosion and desertification.

12. (a) Write notes on energy flow in the ecosystem.

Or

- (b) Write notes on threads to biodiversity.

13. (a) Write notes on Biodiversity at Global, National and Local levels.

Or

- (b) Write notes on various strategies of conservation of Biodiversity.

14. (a) Write notes on ecological pyramids.

Or

- (b) Write notes on air pollution.

15. (a) Write notes on noise pollution.

Or

- (b) Write notes on effects and control measures of nuclear hazards.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on the multidisciplinary nature of Environmental Studies.

Or

- (b) Write an essay on the following resources with special emphasis to how they are overexploited/utilized which in turn damage the environment, (i) Forest Resources and (ii) Food Resources.

17. (a) Write an essay on “India is a mega-diversity nation”.

Or

- (b) Write an essay on Biodiversity and their values.

18. (a) Write an essay on causes, effects and control measures of (i) Marine Pollution and (ii) Water Pollution.

Or

- (b) Write an essay on concept, structure and function of ecosystem.