C–4155	Sub. Code
	83711

M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GAME DEVELOPMENT PROCESS

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define human computer interaction.

2. Identify human characteristics in design.

3. State the golden rule of design.

4. What are the merits of games?

5. Expand MDA.

6. State the dramatic elements of game.

7. Define real vs virtual architecture.

8. What is Game balancing?

9. What is interest curves?

10. Define psychographics.

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

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

11. (a) Define communication. Explain how communication helps in designing.

Or

(b) What are the three practical approaches of developing a game? Explain with suitable examples.

12. (a) Outline the social function of game.

Or

(b) How loop of interaction is used to develop a game?

13. (a) Write about modeling in brief.

Or

(b) What is gaming architecture?

14. (a) Briefly explain organizing game space.

Or

(b) Explain taxonomy of players.

15. (a) Define psychographics on game design.

Or

(b) What ethics are followed by game developers while developing game?

Part C (3 × 10 = 30)

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

16. (a) Explain in detail on the history of evolution of games.

Or

(b) How are the players designed by the game developers? Explain with suitable examples.

17. (a) Discuss in detail on world aesthetics. How does aesthetics helps in design?

Or

(b) What are the various phases in game development? State the process, people involved and the outcome of each phase.

18. (a) What are the three stages of running a game? Explain in detail.

Or

(b) Explain the game build game process.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GAME DESIGN CHALLENGES

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is albedo?
2. Name any two examples of an avatar.
3. Mention the components of game.
4. What makes a good game design?
5. Why do we need character?
6. Define story arcs.
7. What is the most popular game in roblox?
8. Define griefing.
9. Why do we need conflicts in games?
10. What is the alpha stage of game testing?

Part B (5 × 5 = 25)

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

11. (a) Write a note on types of game design.

Or

(b) Define and explain game design atoms.

12. (a) Briefly explain the importance of mechanics.

Or

(b) Why do we need decision? Explain its types.

13. (a) Explain the methods of storytelling with examples.

Or

(b) What is IP? Explain its types.

14. (a) Explain the issues in multiplayer game design.

Or

(b) Give a note on future of social networks and games.

15. (a) "Games as a teaching tool" – justify your answer with suitable examples.

Or

(b) Define serious games. Explain its types with examples.

Part C

(3 × 10 = 30)

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

16. (a) What is puzzle designing? Explain the various types of puzzles. Create one new puzzle game on your own.

Or

(b) Discuss the role, skill and elements of chance with suitable examples.

17. (a) Define sequels and explain its types and importance.

Or

(b) Compare and contrast the concepts of target market, mass market and focus group.

18. (a) How to make a multiplayer? Explain multiplatform, multipurpose and types of multiplayer games.

Or

(b) What is UI? Discuss the process of UI designing with suitable examples.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

VISUALIZATION

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Perception.
2. What is the use of Vanishing point?
3. Define 2D.
4. One point perspective.
5. Define Typography.
6. RGB.
7. Define Balance.
8. What are the principles of design?
9. What is Colour blending?
10. Define Graphics.

Part B (5 × 5 = 25)

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

11. (a) Explain in detail about different drawing materials and tools.

Or

(b) Explain different types of shadows with the help of examples.

12. (a) Illustrate Story board for your favourite cartoon show.

Or

(b) Show the basic light setup for rendering a sphere in three dimensions.

13. (a) Explain in detail about different Drawing Techniques.

Or

(b) Design a character and demonstrate the effect of foreshortening.

14. (a) What is 3D viewing?

Or

(b) Write a short note on basic illumination, RGB and CMYK color models with the help of diagram.

15. (a) Define Script writing.

Or

(b) What are the characteristics of a good design?

Part C (3 × 10 = 30)

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

16. (a) Explain in detail on the different types of perspectives. Explain one point perspective with suitable illustrations.

Or

(b) Define Proportion and gesture with suitable illustrations.

17. (a) Explain in detail on the principles of design.

Or

(b) Illustrate the importance of color wheel and explain in detail the importance of color in the current scenario.

18. (a) Explain in detail the importance of textures in drawing with suitable illustrations.

Or

(b) Write short note on the following :

(i) Thumbnail drawing

(ii) Stick figures

(iii) Line of action

(iv) Balance and rhythm

(v) Positive and negative spaces.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

PROGRAMMING FOR GAMES

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What are the different types of computer based on processing capabilities?
2. What is the significance of processor clock?
3. What are manipulators?
4. What are modifiers? What are the types?
5. List out the operators that cannot be overloaded.
6. What is polymorphism? What are its types?
7. Differentiate seekp( ) and seekg( ).
8. What is namespace in C++?
9. Explain iterator in C++?
10. What is meant by Derived Containers?

Part B (5 × 5 = 25)

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

11. (a) What are the different units of computer? Explain in detail.

Or

(b) Explain the different types of computer software.

12. (a) Explain structures with example.

Or

(b) Explain call by reference with an example.

13. (a) With an example, explain encapsulation.

Or

(b) Explain function overloading with an example.

14. (a) How to write a file using C++ with example?

Or

(b) Explain namespaces with an example.

15. (a) Explain container adaptors in stl C++.

Or

(b) Explain shortest path algorithm.

Part C (3 × 10 = 30)

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

16. (a) Explain shallow copy constructor with example.

Or

(b) Explain relational and logical operators with example.

17. (a) Explain operator increment (pre-decrement and post-decrement) overloading with an example.

Or

(b) Briefly explain the facilities available in fatream class for file operations with example.

18. (a) Explain operators with example.

Or

(b) Explain friend function with suitable example.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

2D GAME ART

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is called visual identity?
2. Define the environment.
3. What is the use of a search bar in photoshop?
4. Will flattening reduce file size?
5. What is the use of guides in photosphop?
6. Write about Image Captioning.
7. Explain scene graph.
8. What is a thumbnail?
9. Define Media Repository.
10. How to use sprite sheets?

Part B (5 × 5 = 25)

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

11. (a) What are the methods of graphic design?

Or

(b) Write about repetition.

12. (a) Write about panels and menus in photoshop.

Or

(b) How to mask layers with vector masks?

13. (a) How Photoshop artistic filters work, with examples of our favorites?

Or

(b) How to use the pathfinder tool in illustrator? Explain.

14. (a) Write about graphic novel designing.

Or

(b) How to create a photoshop matte effect?

15. (a) What are the differences between 2D commercial and free games asset markets?

Or

(b) What does GUI mean in game design?

Part C (3 × 10 = 30)

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

16. (a) List out the advantages and disadvantages of raster graphic and explain.

Or

(b) Explain the following :

(i) white balance

(ii) contrast

(iii) noise

(iv) correct exposure and

(v) sharpening.

17. (a) Write an essay on Photoshop smart filters, how to apply, edit, hide, reorder, duplicate, delete, mask, invert and disable.

Or

(b) How to move, align and distribute objects in illustrator? Explain the usage of gird.

18. (a) What are the principles to be followed to create a puppet in character animator?

Or

(b) How to create a game project more efficiently with a curated asset bundle? Explain.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

GAME DEVELOPMENT USING ENGLISH – I

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is an OpenGL 3D game?
2. Define 2D plane.
3. Define texture.
4. Write about unity Translation.
5. Write about Namespaces in unity.
6. What is a memory leak?
7. Define Skybox.
8. What is called loop cleanup?
9. Define viewpoints.
10. What is called object behaviour?

Part B (5 × 5 = 25)

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

11. (a) Write about the Prefab system in Unity.

Or

(b) Write about level design patterns in 2D games.

12. (a) Write about a coordinate system.

Or

(b) How to manipulate game objects within a scene?

13. (a) What are the functions of a scripted sequence in a video game?

Or

(b) Write about optimization patterns.

14. (a) What can be animated with a particle system?

Or

(b) Differentiate respawning and despawning.

15. (a) Write about voice over in video games.

Or

(b) Write about Al-driven path finding.

Part C

$(3 \times 10 = 30)$

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

16. (a) What are the similarities and differences in 2D and 3D games? Explain.

Or

(b) Explain how to create mobile games for different screen sizes and resolutions.

17. (a) Explain the following :

(i) raycasting

(ii) collision detection

(iii) PBR and

(iv) monobehaviour.

Or

(b) Write an essay on lighting theory for 3D games, how to light a game world in a game engine.

18. (a) Why should a game need a dedicated server? Explain the advantages of a server based game streaming.

Or

(b) Explain how to organize and format game dialogue.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

3D GAME ART

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write about curve rebuild properties.
2. What are fillets?
3. What is a duplicated surface curve?
4. What is the use of Birail options?
5. Write about bump map in Maya.
6. Define Texture baking.
7. What is the use of Zbrush?
8. What is prop modelling in 3D?
9. Define smoothing.
10. Why is set design important for a game?

Part B (5 × 5 = 25)

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

11. (a) Write about 3D positive rotation.

Or

(b) Write about offset curve and offset curve on surface options in Maya.

12. (a) Write about Extend polygonal objects.

Or

(b) Explain the features of the Bevel Plus object.

13. (a) How to make a texture map in Maya?

Or

(b) What does UV stand for 3D? Explain the role of UV Editors.

14. (a) Describe the features of character Modeling.

Or

(b) Explain Gun modeling theory and detail in Maya.

15. (a) What is the role of an Environment artist?

Or

(b) Write about Humanoid animation in game.

Part C (3 × 10 = 30)

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

16. (a) Explain the methods of manipulating moving object in panoramic image stitching.

Or

(b) Explain from CV curve tool object to polygon in Maya.

17. (a) Explain how to use isoparms to refine NURBS surfaces.

Or

(b) Write a essay on the basics of image based lighting in Maya.

18. (a) How to create extremely high-quality weapons using 3D modeling with Maya.

Or

(b) Explain the following using sculpting mask :

(i) paint

(ii) smooth

(iii) scale down

(iv) set value and

(v) masking controls.

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	83724

M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

GAME DEVELOPMENT FOR WEB

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write about the properties of line styles in HTML.
2. What is a line tag in HTML?
3. What is the use of Article tag in HTML5?
4. Write about Javascript Events.
5. What is form data?
6. What is advanced JS?
7. Define JSON parser.
8. Explain the differences between frontend and backend.
9. What is collision detection in games?
10. Define health.

Part B (5 × 5 = 25)

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

11. (a) Why is canvas used in HTML5?

Or

(b) Write about Media elements and canvas in HTML.

12. (a) What are the differences between Attribute and Property in the HTML world?

Or

(b) What are the differences between Subclass and supercalss in Java?

13. (a) What is the difference between GET and POST method?

Or

(b) Describe tree-based and event-based parsers.

14. (a) Write about Push-based and Pull-based framework architectures.

Or

(b) Explain Gameplay Programming.

15. (a) What is the use of Infinite Scrolling Background Image?

Or

(b) Write about the lives handling code.

Part C (3 × 10 = 30)

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

16. (a) Write an essay on the graphics canvas element with canvas scripting API to draw graphics and animation.

Or

(b) When to use SVG and when to use Canvas in HTML? Explain the possibilities and techniques.

17. (a) How to validate a form and password using regular expressions in Java? Explain.

Or

(b) How to bring interactivity to a website with web standards using JavaScript? Explain.

18. (a) Explain how to make a GameObject or Character to move along with parallax effect.

Or

(b) Write an essay on designing game UI with possible game controllers.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

GAME DEVELOPMENT FOR MOBILE

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is array list?

2. What is default constructor in java?

3. Mention any two build tools.

4. Write about mobile platform.

5. Define resource.

6. List any three game app.

7. Mention the purpose of a framework.

8. What is Jviewport?

9. What is the use of particle effects?

10. What is the interactions plane?

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

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

11. (a) What are the different types of inheritance? Explain.

Or

(b) Explain the advantages of math class in java.

12. (a) Write a essay on benefits of mobile plat forms.

Or

(b) What is IDE interface? Explain.

13. (a) Give a note on the importance of manifest file.

Or

(b) What is layout? Explain its working mechanics.

14. (a) Differentiate the concept between texture atlas and texture region.

Or

(b) Prepare a framework for a new game.

15. (a) How any types of sensors are there in mobile?

Or

(b) Explain the working mechanism of parallax scrolling.

Part C (3 × 10 = 30)

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

16. (a) Compare and contrast the importance of data abstraction and encapsulation.

Or

(b) Explain the concept of inheritance. What is generic type? Explain.

17. (a) Write a note on :

(i) Target configurations

(ii) Passing of external file

(iii) Dependency setting.

Or

(b) Explain the role and support of camera setting in the process of game development.

18. (a) Discuss the process and functions of scene and screen transition with examples.

Or

(b) Write a complete game programme with special reference to physical elements and bodies.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

MODELING AND TEXTURING

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Comment on translucency textures.

2. What are the advantages of lossless compression?

3. Write a note on ambient map.

4. Give any two examples for props and their uses.

5. Name the three lights in three point lighting.

6. Comment on Batch render.

7. What is rigging?

8. Write a note on animated mesh.

9. What do you meant by character modeling?

10. How do you assign colour map for a character?

Part B (5 × 5 = 25)

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

11. (a) Explain the use of surface luminance in textures.

Or

(b) Write the graphic file formats and their advantages.

12. (a) Explain the texturing elements with an example.

Or

(b) Illustrate the importance of shading and texturing surfaces.

13. (a) Draw and explain three point lighting for a character created in 3D.

Or

(b) Explain the compositing with an example.

14. (a) Explain the rigid rigging with an example.

Or

(b) Write the importance of proportion and layout in vehicle modeling.

15. (a) Creating hands and feed for characters used in games is a challenge – Explain.

Or

(b) Handing hair and face mesh needs creativity – Explain.

Part C (3 × 10 = 30)

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

16. (a) Explain the modular design with examples.

Or

(b) Creation of mapping is notable task in 3D – Explain.

17. (a) Vehicle model for games need visualization – Explain.

Or

(b) Material allocation for a character used in games need creativity – Discuss.

18. (a) Compare the interior and exterior lighting with examples.

Or

(b) Explain the use of photographs for texture for a successful 3D image.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

GAME DEVELOPMENT USING ENGINE – II

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write a short note on geometry.
2. What is texturing in game design?
3. What do you meant by vertex painting?
4. Write a short note on master track.
5. What is a gamepad input?
6. Write about gaming mouse.
7. Name any two softwares for game development.
8. Tell about spark emitter.
9. What is the role of lighting in gaming?
10. Comment on any two popular games.

Part B (5 × 5 = 25)

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

11. (a) Outline about the BSP and its importance in game design.

Or

(b) Discuss about the process of creating materials or games.

12. (a) Describe about the role of foliage editor in game engines.

Or

(b) Write your views about post processing in gaming.

13. (a) Difference between UI and HUD.

Or

(b) List out the role of setting up AI roaming.

14. (a) Elaborate about GPU in game engines.

Or

(b) Explain about cascade mesh emitters.

15. (a) Express your views about the visual aesthetics in game development.

Or

(b) Explain about the demo reel creation process.

Part C (3 × 10 = 30)

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

16. (a) Explain about the basic of landscape editing.

Or

(b) Discuss about the creation of menus that appears in games.

17. (a) Discuss the UDK game development process.

Or

(b) Demonstrate the various types of boosting ability system while paying games.

18. (a) Explain about the emergence of game development industry in India.

Or

(b) "Free to play games are selling contents" – Comment on this quote.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

GAME PSYCHOLOGY

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Psychology.
2. Who is behaviourism?
3. What is remembering and forgetting in psychology?
4. Give any two points to improve memory.
5. What is cognitive learning?
6. Write the theories in game psychology.
7. Name the theories in game psychology.
8. How video games are made attractive?
9. Define Gamification.
10. Write the potential benefits of games.

Part B (5 × 5 = 25)

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

11. (a) Difference between Humanistic and scientific methods in psychology.

Or

(b) Write the importance of health psychology.

12. (a) Write a short notes on semantic memory in psychology.

Or

(b) What are the theories of intelligence in psychology?

13. (a) Explain the major consequences in operant condition.

Or

(b) What are the characteristics of automated instruction?

14. (a) Explain the human factors involved in controlling the game psychology.

Or

(b) What are the benefits of game learning curve? Discuss.

15. (a) What are the emotional consequences a gamer goes through in educational games?

Or

(b) How games are used as a tool for motivation? Explain.

Part C (3 × 10 = 30)

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

16. (a) What is brief note on the effects of video game violence?

Or

(b) Discuss human factors on controller and display in game psychology.

17. (a) Describe the psychological effects of violent video games.

Or

(b) Explain the methods of learning with appropriate example in psychology.

18. (a) What has been the role of "Symbols and concepts" in game psychology?

Or

(b) Describe the human relation theory in game psychology.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

ARTIFICIAL INTELLIGENCE

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define AI.

2. What is the use of roaming AI?

3. Define Chasing and evading.

4. Define Game AI.

5. Write about Patterning and Way point.

6. Write a note on steering AI.

7. Define grid based canvas.

8. What are the principles of AI?

9. What is fuzzy logic?

10. Define meta knowledge.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain in detail about different AI techniques.

Or

(b) Explain the importance of good game AI.

12. (a) Explain the advantages of AI.

Or

(b) State the difference between game AI and AI.

13. (a) Explain Knowledge representation.

Or

(b) What is the level of AI in problems spaces?

14. (a) What is deterministic and non deterministic?

Or

(b) Explain knowledge acquisition.

15. (a) Define K-strips.

Or

(b) What are the characteristics of behavioural AI?

Part C (3 × 10 = 30)

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

16. (a) What is AI? List out the problems in state space search.

Or

(b) Explain in detail about the design in AI.

17. (a) Explain in detail on the Genetic algorithm.

Or

(b) Illustrate the importance of AI in the current scenario.

18. (a) Explain in detail the importance of creating AI in games.

Or

(b) Explain each the following in a paragraph.

(i) Fuzzy reasoning

(ii) A* algorithm

(iii) Heuristics.

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M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

LEVEL DESIGN

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define level script.

2. What is time calculation in level design?

3. Define level clues.

4. What is normal map?

5. Define attributes.

6. Explain multiplayer map.

7. What is occlusion shaders?

8. Define game engine.

9. Who is called game designer?

10. Define design document.

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

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

11. (a) List out the differences between Level Design vs Level Art.

Or

(b) Discuss about the learning curve of game.

12. (a) Write the advantages of level design software.

Or

(b) What is the role and responsibilities of level designer?

13. (a) Write short notes on level balancing.

Or

(b) Write do you understand by difficulty curve? Explain

14. (a) How do you bake textures in blender?

Or

(b) Discuss about the importance of lighting in video games.

15. (a) Explain the process of making a map for open world game.

Or

(b) What do you understand by the concept of level design document? Explain.

Part C (3 × 10 = 30)

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

16. (a) Describe the characteristics of level design software.

Or

(b) Explain about the placement of object in the levels.

17. (a) Discuss about the use of terrain painting in level design.

Or

(b) Explain in detail the process of placing and customizing the lights in game art.

18. (a) Write an essay on the purpose of Level Design Document.

Or

(b) Describe the steps involved in improving difficulty curve.

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C–4169	Sub. Code
	83745

M.Sc. DEGREE EXAMINATION

GAME TECHNOLOGY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

RESEARCH METHODOLOGY

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Research.
2. Name the different types of research.
3. List the types of research.
4. What is research problem?
5. Define hypothesis.
6. Name the types of variables.
7. What are the methods of data collection?
8. What is a research report?
9. Define the term sampling.
10. What is Cluster analysis?

Part B (5 × 5 = 25)

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

11. (a) What are the criteria of good research?

Or

(b) Write the characteristics of research.

12. (a) Write a short note on Research Design.

Or

(b) What are the criteria to review the literature selected?

13. (a) Define and differentiate the variables in a research.

Or

(b) What is the role of hypothesis in a research?

14. (a) Differentiate primary data and secondary data.

Or

(b) Differentiate open – ended questions and close – ended questions.

15. (a) List out the components of a research report.

Or

(b) Write a short note on different steps in writing report.

Part C (3 × 10 = 30)

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

16. (a) Discuss the various sampling techniques in detail.

Or

(b) Explain the different types of research with suitable example.

17. (a) Describe the merits and demerits of conducting personal Interview.

Or

(b) Explain the Pros and Cons of observation methods.

18. (a) Explain in detail the type of hypothesis.

Or

(b) Explain in detail with an example applied and action research.

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