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83711
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**M.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

**First Semester**

**Game Technology**

**GAME DEVELOPMENT PROCESS**

**(2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is Human Computer Interaction and Role of HCI in Games?
2. Difference between Game Mechanics and Dynamics.
3. What are the different types of fun?
4. Explain Branching Trees.
5. Briefly discuss on Integrating Emergence and Progression.
6. What is Actions and how to incorporate rules?
7. Describe Interest Curves in Player Experience.
8. What is Virtual Architecture in games?
9. List the Dynamics based on Player types & interaction
10. Write a short note on flow of Influence.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What are the different types of players in games? Describe briefly with suitable examples.

Or

- (b) What is fun in games? Describe different types of fun in detail.

12. (a) Discuss briefly the Dramatic Elements of a Game.

Or

- (b) What are Open Worlds? Explain with an example.

13. (a) Discuss briefly Player Experience. Difference between Immersion and Interaction.

Or

- (b) Explain briefly on Dynamic Game Balancing.

14. (a) What is Avatars? Explain in detail the advantage and disadvantage of using Avatars in Games?

Or

- (b) What is Game Space? How to Design & Organize a game space?

15. (a) What is a Player Community? How to develop Strong Communities?

Or

- (b) Is games are ethically designed? Justify the statement.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Choose any game of your choice and categorize the gameplay using MDA approach.

Or

- (b) What are non-digital games? Illustrate its process of designing.
17. (a) What is Chance and Skill in games? How do you add and remove mechanics to games in this context?

Or

- (b) What is Level Designing in Games? Explain in detail with suitable example.
18. (a) Discuss in detail about Player and Taxonomy of Players. Also explain how to balance a game based on its players.

Or

- (b) Explain in detail on the basic principles of Game Making and designing for human mind.
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**M.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

**First Semester**

**Game Technology**

**GAME DESIGN CHALLENGES**

**(2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is Game Design? What are the different types of Game Design?
2. Explain Slow Boil approach in Game Designing.
3. What are the different ways for pooling Game Ideas?
4. What is Dilemmas?
5. What is magic circle in gaming terms?
6. Define the term Sequel. List the types of Sequels.
7. What is 3-act Story?
8. What is Griefing in games?
9. What is Synchronous and Asynchronous realtime games?
10. Game is a teaching tool. Justify the statement.

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) What is Game Mechanics? Explain the common classes of mechanics.

Or

- (b) What are Game Design Atoms? Explain in detail.

12. (a) Briefly explain on what is randomness and different implementing.

Or

- (b) Explain the trade-off mechanics that leads to interesting decision making.

13. (a) What is Sequel in Games? Briefly explain its types.

Or

- (b) Explain Campbell's five part story arc.

14. (a) Explain the consideration for multiplayer, multipurpose and multiplatform games.

Or

- (b) What is the future of Social Networking Games?

15. (a) Explain the difference between Serious and Casual games with examples.

Or

- (b) Explain the power of Games beyond fun and Entertainment.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) What is Puzzle Designing? How to design a new kind of puzzle in your game? Explain different types of puzzles.

Or

- (b) Explain about the element & role of chance in game designing.
17. (a) What is Intellectual Property in Games? Explain its classifications in detail.

Or

- (b) What are Multiplayer Games? Explain the types and issues associated with Multiplayer Games.
18. (a) What is User Interface? Explain the process of UI Designing with suitable example.

Or

- (b) Explain in detail on how to Balance between Skill and Chance in Games.
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**M.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

**First Semester**

**Game Technology**

**VISUALIZATION**

**(2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are design principles?
2. What are the different types of font styles?
3. Why is it important to draw perspective?
4. What is vanishing point?
5. What are the attributes of colors?
6. Define color mediums.
7. What are the types of textures?
8. What are the rules of typography?
9. What are the basic shapes used for constructing a human figure?
10. What are cool colors?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What is good typography? Explain.

Or

(b) Explain the five different type of color harmony.

12. (a) What is color blending?

Or

(b) What are the different types of texts in art?

13. (a) Write a short note on dynamic poses

Or

(b) Write the differences between additive and subtractive model.

14. (a) Explain color psychology.

Or

(b) Write the differences between realistic and semi realistic characters.

15. (a) What is live drawing? How is it important for an artist?

Or

(b) Explain one point perspective with two examples.



**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on design fundamentals and characteristics of good design.

Or

- (b) Explain
- (i) The importance of typography in game.
  - (ii) What are the principles of typography?

17. (a) Explain the character development process.

Or

- (b) Explain
- (i) The different eye levels in perspectives.
  - (ii) One point perspective with examples.

18. (a) Write are the principles of

- (i) Gestalt theory and
- (ii) Color theory

Or

- (b) What are the different types of lettering? Explain briefly.
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**M.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

**First Semester**

**Game Technology**

**PROGRAMMING FOR GAMES**

**(2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the most widely used application software?
2. What are the functions of a computer system?
3. What are modifiers? What are the types?
4. Call by value vs. call by reference. Explain?
5. What is dynamic binding or late binding?
6. What is static binding or early binding?
7. Differentiate put ( ) and get ( ).
8. Differentiate tellp ( ) and tellg ( ).
9. Explain containers.
10. What is vector in c++?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the characteristics of Computers.

Or

- (b) Explain the basic anatomy of the computer system.

12. (a) What is the difference between equal to (=) and Assignment Operator (=) and explain with an example?

Or

- (b) Differentiate array vs list.

13. (a) With an example, explain multilevel inheritance.

Or

- (b) Define a virtual function. Explain the need of a virtual function with an example.

14. (a) Write a program to handle exceptions.

Or

- (b) Explain namespace with an example.

15. (a) Write a program to find the sum of digits until it becomes a single digit.

Or

- (b) How to generate a random number within limits (say 30 -50) with example.

**Part C** $(3 \times 10 = 30)$ Answer **all** questions.

16. (a) Explain classification of computers.

Or

- (b) Write a program to find the factorial of a number using functions.

17. (a) What is exception handling? Write a C++ program to demonstrate the “try”, “throw”, and “catch” keywords for implementing exception handling?

Or

- (b) Explain abstract class with example.

18. (a) Explain binary search algorithm with example.

Or

- (b) List and explain five member functions from stack and queue in STL.

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