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Question Paper Code : X 20377

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020
Seventh Semester
Computer Science and Engineering
CS 6006 – GAME PROGRAMMING
(Regulations 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. What is the need of physics-based simulation in game programming ?
2. Highlight the features of Shader Model.
3. How to balance between difficulty and ability of gameplayers ?
4. State the term “Game loop” with example.
5. Illustrate the need of user interface management system in game programming.
6. List out the suitable data structure used for game programming.
7. Examine the use of Java multithreading in game development.
8. In what way DirectX is needed in the development of games ?
9. Mention some of the popular puzzle games.
10. Identify the famous multi-player games in real world.

PART – B

(5×13=65 Marks)

11. a) Explain the terms with respect to game programming, Projections, Clipping, Simulations, Animations. Justify the importance of the existence of the relationship with the terms.

(OR)

- b) Analyze the following algorithms of realistic shading with respect to the types of mapping.



12. a) Describe in detail about the things you can do with a game physics system. Give example.

(OR)

- b) Sketch out the features of Hierarchical game profiling with examples.

13. a) Draw the architecture with its application layer and explain its features.

(OR)

- b) Elaborate the steps involved in game event management with examples.

14. a) Assess how the Android Studio IDE provides the fastest tools for building game applications. Describe the unique features of iOS user interface.

(OR)

- b) Write a Python program for automatic Tic Tac Toe game using random number.

15. a) What is the procedure to develop a 3D interactive game in DirectX ? Give a detailed explanation.

(OR)

- b) Examine the process of developing tile-based games with the help of DirectX. In what way it differs from isometric games.

PART – C

(1×15=15 Marks)

16. a) Compare and contrast the single player games with multi-player games in terms of player capability and game efficiency with examples.

(OR)

- b) Explain in detail the different gaming platforms with the list of popular games developed in each gaming platform.
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