Reg. No. : [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Question Paper Code : 91378

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019

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. Define Shader.

2. State the representation schemes used in three dimensional objects.

3. In what way Double-Ended Stack Allocator is efficient.

4. Illustrate the usage of Context-Sensitive Controls.

5. Draw the architecture of Game Application Layer.

6. State the different Reading Inputs.

7. Summarize the advantages that OpenGL have over Microsoft's proprietary Direct3D.

8. Analyze how mobile gaming for Android can be developed ?

9. Differentiate single player and multi-player games.

10. Show how DirectX is used to develop isometric games ?

PART – B 　　　　　　　　　　　　　　　　　(5×13=65 Marks)

11. a) Examine the functionalities of stages evolved in the various shader models.

(OR)

b) Discuss the issues related in 3D modeling and rendering. Give example.

12. a) Describe in detail how collision detection algorithms are categorized.

(OR)

b) Sketch out the features of Game Engine architecture with a neat diagram.

13. a) i) Draw the multithreaded main loop architecture. **(7)**

ii) Discuss about caching game data with an example. **(6)**

(OR)

b) Analyze how linear component of 3D objects can be represented and manipulated in the game engine.

14. a) Develop a video game for Unity game engine gaming console.

(OR)

b) Summarize how to make games with Python ? Evaluate the Python support for games and mention some famous games written in Python.

15. a) Design a 3D version of a ball-and-paddle game and explain the steps in detail.

(OR)

b) Assess the process of evaluating the player capability and game efficiency in single-player games.

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PART – C   (1×15=15 Marks)

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16. a) Interpret how to create graphical point-and-click adventure games using Adventure Game Studio ? Summarize the adventure games with examples.

(OR)

b) Analyze how DirectX is helpful in the making of a 2D interactive game. Explain.

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