

B.E.Eighth Semester (Information Technology) (C.B.S.)  
**Gaming Architecture & Programming**

P. Pages : 2

Time : Three Hours



**NKT/KS/17/7619**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Solve Question 11 OR Questions No. 12.

1. a) Explain games and it's principles. 4  
b) Describe development phases in gameplay. 10

**OR**

2. a) Describe game and hardware abstraction. 7  
b) Define Token. Explain the concept of tokens by taking example. 7
3. a) Write in brief "The State of the art". 6  
b) What are the game development issues ? Discuss core groups in software factory and their interactions. 7

**OR**

4. a) Explain architectural styles in detail. 9  
b) Explain blue-sky research. 4
5. a) Explain seven golden principles of effective design. 7  
b) Describe five important aspects in game development and the three lead balloons. 7

**OR**

6. a) Write note on game platforms in details. 7  
b) Write note on DirectX and OpenGL. 7
7. a) Write note on : 8  
i) Naked pointer ii) Smart pointer  
iii) Video RAM iv) Memory alignment

b) Explain popular source control software.

5

**OR**

8. a) Explain working with keyboard concept in detail.

7

b) Describe user interface components.

6

9. a) Write note on :

6

i) Chroma key

ii) Sprites

b) Explain various graphics file format.

4

c) Write tasks during the initialization phases.

3

**OR**

10. a) Write note on :

8

i) The Main loop.

ii) Nice Clean exit.

b) What are the two methods of drawing text on screen and what are its advantages and disadvantages ?

5

11. a) Define 3D middleware ? Describe the popular 3-D engines currently in use ?

7

b) Write a short notes on 3-D graphics pipeline.

6

**OR**

12. a) Explain data compression techniques.

6

b) Explain resource cache & scene graph.

7

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