F 9122

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Reg.	No

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2011

Seventh Semester

Branch : Computer Science and Engineering/Information Technology

COMPUTER GRAPHICS (R, T)

(Regular/Supplementary)

Time : Three Hours

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Maximum : 100 Marks

 $(10 \times 4 = 40 \text{ marks})$

Answer all questions.

Part A

Each question carries 4 marks.

- 1. Discuss the basic concepts of Computer Graphics.
- 2. Explain the applications of Raster scan Graphics.
- 3. Explain what is meant by line chipping.
- 4. Briefly explain polygon chipping.
- 5. Give a brief description of 3D display method.
- 6. Explain spline representation.
- 7. Explain gamma correction of intensity.
- 8. Write brief note on gouraud shading.
- 9. Briefly explain general computer animation functions.
- 10. Write a brief note on morphing.

Part B

Each question carries 12 marks.

11. (a) List the input devices and explain the working of each.

Or

- (b) List the display devices and explain the classification of display devices used in computer graphics.
- 12. (a) Explain in detail Bresenham's circle drawing algorithm.

Or

(b) Explain what is 2D transformation. Briefly explain any *two* geometric transformation applied to graphic object in 2D transformation.

Turn over

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13. (a) Explain in detail Bezier curve generation technique.

Or

(b) Describe polygon surface method to represent 3D objects.

14. (a) Briefly explain classification of visible surface detection algorithms.

Or

(b) Explain the scan line method for hidden surface elimination.

15. (a) Explain in detail the self squaring fractals.

Or

(b) Briefly explain Raster Animation.

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 $(5 \times 12 = 60 \text{ mar})$