Reg. No. :

Question Paper Code: 37022

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Seventh Semester

Computer Science and Engineering

01UCS702 - INTERACTIVE COMPUTER GRAPHICS

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define Affine transformation.

2. Write the working principles of random scan systems.

3. What are homogeneous co-ordinates?

4. Define Spline.

5. What are blobby objects?

6. List any four real time animation techniques.

7. Difference Mandelbrot and Julia sets.

8. What are key frame systems?

9. List the use of virtual reality.

10. What is meant by VRML?

PART - B (5 x 16 = 80 Marks)

11. (a) Enumerate the steps involved in line drawing algorithms with an example.   (16)

Or

(b) Explain briefly about the working principles of Random scan system and Raster scan system with neat diagram. (16)

12. (a) Explain about translation, scaling and rotation of two dimensional geometric transformations. (16)

Or

(b) Illustrate the iterations of Cohen-Sutherland Hodgeman polygon clipping. (16)

13. (a) Analyze and justify the concept of 3D Viewing. (16)

Or

(b) Explain about parallel and perspective projections and Also derive their projection matrices. (16)

14. (a) Explain in detail about HLS color model. (16)

Or

(b) Characterize the procedure of Raster animations. (16)

15. (a) Interpret the file format used data representations in multimedia. (16)

Or

(b) Explain in detail about the various types of multimedia authoring systems. (16)

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