S.No. 585 **12PCA14**

(For the candidates admitted from 2012–2013 onwards)

M.C.A. DEGREE EXAMINATION, NOVEMBER 2017.

Fourth Semester

COMPUTER GRAPHICS

Time : Three hours Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Describe the working principle of Raster scan displays.

Or

(b) Write a short notes on graphics software.

2. (a) Describe curve attributes.

Or

(b) Describe composite transformation.

3. (a) Write about homogenous co-ordinates.

Or

(b) Give short notes on polygon clipping.

4. (a) Give a summary of logical input devices.

Or

(b) Write a note on light sources.

5. (a) Give an account on filtering techniques.

Or

(b) What is animation? Write about the basic rules of animation.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Illustrate the working principle of CRT colour monitor with diagram.

Or

(b) Explain the Bresenham's algorithm for line with slope magnitudes<1.

7. (a) Discuss on color and grayscale levels.

Or

(b) Explain 2D translation and scaling with examples.

8. (a) Describe 3D translation along with its equation.

Or

(b) Describe curve clipping, text clipping and exterior clipping.

9. (a) Illustrate the various input functions.

Or

(b) Summarize the various basic illumination models.

10. (a) Enumerate the mechanisms for image storage.

Or

(b) Describe the various methods of controlling animations.

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