

# Madras University

## M.C.A Computer Graphics Question paper

Time: Three hours

Maximum: 75 marks

### PART A - (5 x 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) Explain any one method of character generation.

Or

(b) How are polygons drawn as an extension of line drawing?

2. (a) Obtain from first principles a matrix for two dimensional rotation.

Or

(b) How are segments created in graphics?

3. (a) What is multiple windowing? Give examples.

Or

(b) What is echoing? What is its effect?

4. (a) What is a perspective view? How is it obtained?

Or

(b) What is binary space partition? How is it useful?

5. (a) What is the use of half tones in graphics?

Or

(b) What is Gamma correction?

**PART B - [5 x 10 = Marks 50]**

Answer any FIVE questions.

All questions carry equal marks.

6. Describe in detail Bresenham's line drawing algorithm.
7. What are raster techniques? Describe in detail.
8. Explain any one polygon clipping algorithm.
9. What is device handling? Describe an algorithm for device handling.
10. Explain the different 3D transformations in graphics.
11. Describe the painter's algorithm.
12. Explain any one shading algorithm in detail.
13. What are fractals? How are fractals used in curve generation?

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