# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

## M.C.A.DEGREE EXAMINATION - COMPUTER APPLICATIONS

THIRDSEMESTER - APRIL 2017

### CA 3875- COMPUTER GRAPHICS AND MULTIMEDIA APPLICATIONS

Date: 24-04-2017 Dept. No. Max.: 100 Marks

Time: 09:00-12:00

#### Part-A

### **Answer ALL Questions**

10 \* 2 = 20

- 1. What is resolution?
- 2. What are the input devices?
- 3. Define spline surface.
- 4. What is clipping window?
- 5. What is Depth cueing?
- 6. Compare parallel projection from perspective projection.
- 7. Define Multimedia.
- 8. What is Decompression?
- 9. Comment on VRML.
- 10. What are the image file formats?

#### Part - B

### **Answer ALL Questions**

5\*8=40

- 11. a) Write OpenGL specification for the following
  - i)POINTS ii)POLYGON
  - b) Explain the concept of line drawing using DDA algorithm.
- 12. a) Write short notes on Spline specification.
  - b) Illustrate the general procedure for mapping the clipping window into a normalized viewport.
- 13. a) Explain XYZ color model in detail.

or

- b) Explain the various development stages for animation.
- 14. a) Write short notes on Video conferencing.

or

- b) Explain various types of sound files.
- 15. a) Write short notes on Multimedia databases.

Of

b) Explain in detail about various technique used in Composition.

# Part-C

# **Answer any TWO Questions**

2\*20=40

- 16. a) Discuss Raster scan and Random scan system in detail.
  - b) Explain basic Transformation in detail.
- 17. a) Discuss the YIQ and CMY color model.
  - b) Write the OpenGL functions for three dimension viewing
- 18. a) Explain in detail about Lossless Compression.
  - b) Write any two OpenGL Interactive input device functions.

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