885

MCA-301

December - Examination 2018

MCA 3rd Year Examination

Computer Graphics

Paper - MCA-301

Time : 3 Hours] **[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A $8 \times 2 = 16$

(Very Short Answer Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1) (i) What do you mean by Raster Graphics?

(ii) What is DirectX?

(iii) What is Refresh Rate?

(iv) List the uses of Aliasing.

(v) Name the algorithm used for filling the interior of a polygon.

(vi) Name any two Animation softwares used for creating computer animations.

(vii) What do you mean by Morphing?

(viii) Give the defination of illumination, Lighting and Shading.

Section - B

$4 \times 8 = 32$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

2) Write short note on parallel projection.

3) What is Transformation? Write its different types.

4) How mid-point circle algorithm used to draw a circle? Explain with example.

5) What is computer Graphics? Explain the difference between interactive and non-interactive computer graphics.

6) Differentiate between Beam Penetration and Shadow Mask CRT Monitors.

7) Explain Corthographic Projection with suitable example.

8) Discuss design of the input function for the event mode.

9) What is Color Model? Explainant one Color Model with example.

Section - C

$2 \times 16 = 32$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

10) Describe Scan Line Algorithm with suitable example.

11) Explain DDA line drawing algorithm with suitable example. Also mention its drawbacks.

12) Write a short note on:

    (i) Shearing and Reflection

    (ii) Antialiasing

13) Explain the basics of transformation in 3D with suitable example.