Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

BCA-MCA Dual Degree (Semester – 6th)

COMPUTER GRAPHICS

Subject Code: BMCAS1601

Paper ID: [19340124]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Briefly explain the following:

a) Point Clipping.
b) Plotters.
c) Widow Port and View Port.
d) Z-Buffer.
e) RGB Color Model.
f) Look Up table.
g) Digitizers.
h) The use of Light Pen.
i) Reflection Shear.
j) Composite Transformations.

Section – B **(5 marks each)**

Q2. Explain DDA Line Drawing Algorithm.
Q3. Differentiate between Random Scan and Raster Scan Display Methods.
Q4. Differentiate between Boundary Fill and Flood Fill Algorithm.
Q5. Explain Halftoning and Dithering.
Q6. Explain Painters algorithm.

Section – C **(10 marks each)**

Q7. Explain Windowport to Viewport Transformation.
Q8. Explain 2-D transformations: Translation, Rotation, Shearing, Scaling.
Q9. Differentiate between Parallel and Perspective Projections.