Roll No……..….. **Total No. of Printed Pages: [1]**
Total No. of Questions: [09]

B. Tech (CSE) (Semester –5th)
COMPUTER GRAPHICS
Subject Code: BCSED1511
Paper ID: 18111124

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. Attempt the following:

a) Define Antialising?
b) What is Projection and its types?
c) Write the 2D matrix representation of shearing transformation.
d) Write difference between Aspect Ratio and Persistence.
e) Why interlacing is used in raster scan display
f) Define vanishing point.
g) Differentiate between random scan and raster scan systems.
h) What do you mean by scan conversion.
i) Write about Polygon clipping.
j) Define term of Rendering and Fractals.

Section – B **(5 marks each)**

Q2. Explain Depth sort algorithm for hidden surface removal.
Q3. Write down Bresenham's line drawing algorithm and explain it with example.
Q4. Write down the difference between boundary fill and flood fill algorithms.
Q5. Explain about the Conversion between RGB and CMY color Models.
Q6. Difference between LCD and LED and which is better and why?

Section – C **(10 marks each)**

Q7. Explain applications of Computer Graphics.
Q8. What is Line Clipping? Explain Cohen Sutherland Line Clipping Algorithm with example.
Q9. Define transformation. Explain two dimensional transformations with examples.