Roll No. $\square$ Total No. of Pages: 02
Total No. of Questions : 07
B.Sc.(Computer Science) (2013 \& Onwards) (Sem.-6)

COMPUTER GRAPHICS
Subject Code : BCS-606
Paper ID : [72786]
Time: 3 Hrs.
Max. Marks : 60

## INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

## SECTION-A

1. Write short notes on :
a) What are the applications of computer graphics?
b) Discuss the working of a digitizer.
c) Differentiate between raster-scan and random-scan.
d) Write the attributes of a line.
e) Differentiate between windowport and viewport.
f) What are the various anomalies when perspective projection is used?
g) What are homogenous coordinates?
h) What is 2-D reflection?
i) What is the difference between Cohen Sutherland and Sutherland Hodgman algorithms for clipping?
j) Differentiate between orthographic and oblique projections.

## SECTION-B

2. Describe the various display devices used in computer graphics. List the relative advantages and disadvantages of these systems.
3. What are the various color display techniques used in computer graphics? Briefly discuss each.
4. Discuss the Bresenham's circle drawing algorithm.
5. Derive the transformation that rotates an object $0^{\circ}$ degree about the origin. Write the matrix representation for this rotation.
6. Explain the Liang Barsky algorithm for clipping.
7. What are the various 3-D transformations? Discuss translation and scaling in detail.
