S.B. Roll No..

COMPUTER GRAPHICS
6th Exam/Comp/IT/CSc/6217/6862/Nov' 2016

Duration: 3 Hrs.   **M. Marks : 75**

SECTION A

Q1. Do as directed   **10x1.5=15**

   (i)   The process of scaling changes the _____ of an object.
   (ii)   Pixel is the smallest _____ point on the screen.
   (iii) CSG stands for _____.
   (iv)   A rectangular area specified in world co-ordinates is called a _____.
   (v)   The process of cutting away the image at the windows boundaries is called_____.
   (vi)   _____are non linear transforms.
   (vii) _____is an image space algorithm
   (viii) DDA stands for _____.
   (ix)   A depth buffer algorithm is not an object space hidden surface removal algorithm. (T/F)
   (x)   Aspect ratio gives the ratio of vertical points to horizontal points. (T/F)

SECTION - B

Q2. Attempt any six questions   **6x5=30**

   (i)   What is clipping explain its types.
   (ii)   Explain various types of display devices used in computer graphics.
   (iii) Differentiate between Raster scan system and random scan system.
   (iv)   Write applications of computer graphics.
   (v)   What are the side effects of scan conversion?
   (vi)   Explain Z buffer algorithm.
   (vii) What is vanishing point?
   (viii) Write a note on flood fill and boundary fill algorithm.
   (ix)   What is blanking?

SECTION – C

Note: Attempt any three questions   **3x10=30**

Q3.   What is transformation? Explain translation and rotation along with their matrix representation in 2D.
Q4.   Explain Cohen Sutherland Line Clipping algorithm.
Q5.   Explain parallel and perspective projections.
Q6.   What is DDA algorithm? Explain its steps.
Q7.   Write a short note on :
      (i) Wire frame model
      (ii) Window to view port transformation