Q.1 (5x4=20)
(a) What is anti aliasing? Why it is considered in any graphics systems.
(b) Differentiate among translation and translation vector.
(c) What is projection? Define it and explain in brief?
(d) List the importance of multimedia.

SECTION-A

Q.2. (a) What do you mean by display system. Give some examples of display systems. Discuss working of any display system known to you? (10)
(b) Define pixel and resolution. A graphics system of type Raster Scan has the resolution 640x480. What size of frame buffer(in bytes) is needed for it to store 12 bits per pixel? (10)

Q.3. Discuss the Mid point Circle drawing Algorithm. Use this algorithm to plot a circle whose radius is 5 units. Show all the steps necessary to plot it. (20)

Q.4 Describe the transformation. Show that the order in which transformation are performed is important by applying the transformation of the triangle A(1,0), B(0,1), C(1,1) by
(a) Rotated 45 degree about the origin and then translating in the direction of the vector (1, 0).
(b) Translating first and then rotating by 45 degree about the origin. (20)

SECTION-B

Q.5 What is a window and how it differs from the viewport. Give the algorithm for window to viewport transformation. Explain the Sutherland and Cohen subdivision algorithm. (20)

Q.6 (a) Describe the perspective projection in detail. (10)
(b) Write short notes on Z buffer algorithm. (10)

Q.7 (a) What is Multimedia? Explain its applications. (10)
(b) Explain the analog to digital conversion process. List the advantage of digital system. (10)