	Class: Integrated M. Sc.	**Semester:** V	**Branch:** Computer Science	**Marks**
	SUBJECT: Computer Graphics	**CODE:** CSC-001	**Faculty:** Mamta Rani	**20**
	Assessment: CIA	**NO:** 1	**Time:** 3 hours	

Q - 1. Give a comparison between Raster scan display and Random scan display.   [**Marks 4**]

Q - 2. Suppose there is a system with 12 inch by 14 inch video monitor that can display 120 pixels per inch. If memory is organized in one byte words, the starting frame buffer address is 0, and each pixel is assigned 4 bits of storage, what is the frame buffer address of the pixel with screen coordinate (x, y)?   [**Marks 4**]

Q - 3. For a medium resolution display of 640 pixels by 480 lines refreshing 60 frames per second, the video controller fetches 16 bits in one memory cycle. RAM chips have cycle times around 200 ns. How many memory cycles will be needed for displaying 16 bits per pixels in one second?   [**Marks 2**]

Q – 4. Use the midpoint method and symmetry considerations to draw the parabola

$$x = y^2 - 5$$

over the interval $-10 \leq x \leq 10$. Write the complete algorithm.   [**Marks 10**]