IMS ENGINEERING COLLEGE	IMSEC/QF/48		
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	Issue No. : 2		
Tutorials/Assignments/Quizes	Issue Date: 1 May 2010		
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Subject Name: Computer Graphics	Subject Code: NCS-403		

Assignment 3

- 1.Describe computer graphics in terms of application and why we are using transformation in Computer graphics with justification?
- 2. Explain the working of LED, LCD.
- 3. If base address of a frame buffer is 100 and screen size is $(15 \text{ inch} \times 19 \text{ inch})$ with resolution is 13 dpi (dot per inch) calculate the memory location where the coordinate of pixels are store.
- (i) Pixel P1 at A (200, 25)

- (ii) Pixel P2 at B (75, 45)
- 4. Write short note on the following:
- (i) Random Scan and Raster scan display
- (ii) Frame buffer and Video controller
- 5. Rasterize the line between the points (20,10) and (30,18) by using the bresenham's line drawing algorithm.
- 6. Write Liang-Barsky algorithm for line clipping. Use the same to clip the line P1 (-17, -34) to P2 (25,57) against the window having diagonally opposite corners as (0,0) and (17, 17).
- 7. Consider the line L and triangle ABC. The equation of line L is y=1/2(x+4) and triangle ABC, A(2,4),B(4,6), C(2,6). Reflect the triangle about L.
- 8. Explain Composite Transformation. Prove that two-dimensional rotation and scaling commutative if Sx=Sy and $\Theta=n\pi$.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
СО	1,2	1,2	1,2	1,2	1,2	1,2,3	1,2,3	1,2,3
РО	1,12	1,2,12	1,2,12	1,2,3,12	1,2,12	1,2,12	1,2,12	1,2,12
PSO	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4