

TRIBHUVAN UNIVERSITY
FACULTY OF MANAGEMENT
Office of the Dean
2009

Full Marks: 40
Time: 2 hrs

BIM / Fifth Semester / ITC 221: Computer Graphics

Candidates are required to answer the questions in their own words as far as practicable

Group 'A'

1. Brief Answer Questions:

[10x1=10]

- a. What is retraced and interlaced refresh procedure?
- b. What is surface-rendering algorithm?
- c. What is diffuse reflection?
- d. In which condition the pixel point (x, y) for line can be plotted directly without processing them using Bresenham Line drawing Algorithm?
- e. List out some commonly used graphics function in C with its purpose.
- f. What information does convey by the polygon table? Where it can be used?
- g. What is Intensity Attenuation?
- h. What is an electronic touch panel?
- i. What is GKS system,?
- j. What is Point Source?

Group 'B'

Attempt any FIVE Questions:

[5 x 6 = 30]

2. What is visible surface determination? Explain z-buffer algorithm.
3. What does an illumination model do? Briefly describe Gouraud Shading.
4. Differentiate between parallel and perspective projections.
5. A triangle with vertices A(4, 5), B(2, 1), C(6, 1) is required to be enlarged four times its initial size about any fixed point (4, 2). Find the final coordinates.
6. Explain raster Display system.
7. Write Short notes on: (Any Four)
 - a. Ambient light
 - b. Diffuse reflection
 - c. Back-face detection method
 - d. Run length encoding.
 - e. Virtual Reality