Tribhuvan University
Institute of Science and Technology

2071

Bachelor Level/ First Year/ First Semester/ Science   Full Marks: 60
Computer Science and Information Technology (CSc. 254)   Pass Marks: 24
(Computer Graphics)

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Attempt all the questions.

1. Define a computer graphics and its applications.
2. Explain the scan conversion algorithms with example.
3. Explain the 2D and 3D transformations.
4. Explain the window to view port transformation with its applications.
5. Explain with algorithm of generating curves.
6. Set up a procedure for establishing polygon tables for any input set of data points defining an object.
7. Define algorithms for visible surface detection.
8. Define the following terms(any two)
   a) Polygon Messes
   b) 3D viewing
   c) Boundary Representation
   d) Sweep Representation
9. Explain the visible surface detection with an algorithms.
10. Explain the virtual reality and animation in detail.
                    OR
    Explain the line scan algorithm with example.