Computer Graphics

2009 May

Science Information Technology

FYBSc-IT

Semester 2

University Exam

University of Mumbai

/-Ex-I-09-D-Scan-59

FYBSc-IT
SEM-II

18th may 2009

Con. 83-09.

Computer Graphics

DM-5202

(3 Hours)

[Total Marks : 100

N.B. : (1) Question No. 1 is **compulsory**.
    (2) Attempt any **four** questions from the remaining.
    (3) **All** questions carry e**q**ual marks.

Write short notes on :—   20
  (a) Z - buffer algorithm
  (b) Polygon clipping
  (c) Give the difference between raster scan and random scan systems.

(a) Derives expressions for decision parameter of mid - point circle algorithm.   10
(b) Explain the Sutherland and Cohen subdivision algorithm for line clipping with the   10
    help of an example.

(a) What do you mean by computer animations ? Discuss the steps involved in the   10
    design of an animation sequence.
(b) Write a detailed not on the various types of projections.   10

(a) Flood fill algorithm.   10
(b) Boundary fill algorithm.   10

(a) Write a note on Bezier curves. Explain the midpoint approach of constructing   10
    Bezier curves.
(b) Explain DDA algorithm. (digital differential analyzer)   10

(a) Write short notes on: shadow mask technique.   10
(b) What is morphing ? Explain its rules.   10

Write short notes on :—   20
  (a) Light pen
  (b) Voice systems
  (c) Image scanner.

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