Code No.: 9A05503/R09

B.Tech. III Year II Semester Regular and Supplementary Examinations Set-4

April/May - 2013

COMPUTER GRAPHICS

(Information Technology)

Time: 3 Hours Max. Marks: 70

*Answer any **FIVE** Questions*

***All** Questions carry **equal** marks*

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1. (a) Explain the working of a plasma panel.

   (b) Explain the design issues in color CRT monitors.

2. Explain how the Potentially Entering (PE), Potentially Leaving (PL) cases are determined in Cyrus-Beck algorithm.

3. (a) What is meant by reflection? Derive the transformation matrices for reflection about the line y = – x and reflection about an arbitrary line y = x.

   (b) Enumerate the differences between 2D-graphics and 3D-graphics.

4. (a) What is a component? Explain the hierarchy of robot components.

   (b) What is DAG? Discuss various purposes of DAG with a suitable example.

5. What is a quadric surface? Explain different types of quadric surface with example.

6. Explain in detail about constructive solid geometry.

7. (a) Describe any two color models used in computer graphics.

   (b) Explain half-toning technique.

8. Explain the method of ray tracing for detecting visible surfaces.