R09

COMPUTER GRAPHICS
(Common to ECC and CSE)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   List the operating characteristics of:
   (a)   Raster refresh systems.
   (b)   Vector refresh systems.
   (c)   Plasma panel.
   (d)   LCD's.

2   (a)   Write and explain about an algorithm to draw a polygon.
   b) (Explain the basic approaches in seed filling algorithm for polygons.

3   (a)   Derive the 2D transformation matrix for rotation about an arbitrary point.
   (b)   Briefly explain the 3D primitives of graphics systems.

4   What is a structure network? What is the use of structure network in editing dynamic effects?

5   (a)   What is a polygon mesh? Explain with example.
   (b)   Explain super ellipse with example.

6   (a)   What are the components of a solid modeling system? Explain them.
   (b)   Write notes on spatial-portioning representation of solid objects.

7   Explain the following color terms:
   (a)   Hue.
   (b)   Saturation.
   (c)   Lightness.
   (d)   Brightness.

8   (a)   Discuss the problems with interpolated shading.
   b) (What is meant by texture mapping? Explain it.

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